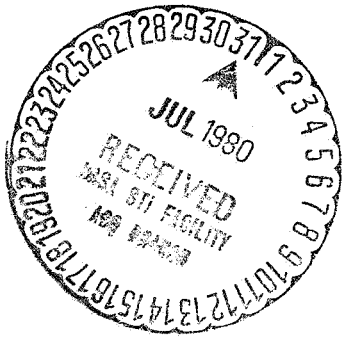
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THE NIMBUS 5 DATA CATALOG

VOLUME 4

1 JUNE 1973 THROUGH 31 JULY 1973
DATA ORBITS 2305 THROUGH 3123



GODDARD SPACE FLIGHT CENTER
GREENBELT, MARYLAND

THE NIMBUS 5 DATA CATALOG

Volume 4

1 June 1973 through 31 July 1973
Data Orbits 2305 through 3123

Prepared by

Allied Research Associates, Inc.
Baltimore, Maryland

For the

ERTS/Nimbus Project

February 1974

GODDARD SPACE FLIGHT CENTER
Greenbelt, Maryland

FOREWORD

This is the fourth volume of a series of catalogs published by the National Aeronautics and Space Administration to document data acquired from the Nimbus 5 meteorological satellite. This volume covers the period from 1 June 1973 through 31 July 1973 with subsequent catalogs to contain documentation for succeeding periods throughout the useful lifetime of Nimbus 5.

Background information concerning the Nimbus 5 meteorological satellite system and a description of the experiments and data formats have been published separately in The Nimbus 5 User's Guide, with post-launch User's Guide information changes and corrections included in the data catalogs. The Nimbus 5 catalogs present the type of data available, anomalies in the data, if any, and geographic location and time of the data.

The assembly and editing of this catalog was accomplished by Allied Research Associates, Inc. (ARA), Baltimore, Maryland, under contract number NAS 5-21617 with the Goddard Space Flight Center, NASA, Greenbelt, Maryland.

S. Weiland
Project Manager
ERTS/Nimbus Project
Goddard Space Flight Center

TABLE OF CONTENTS

		Page
FOREWORD		iii
SECTION 1.	SUMMARY OF OPERATIONS	1-1
1.1	Introduction	1-1
1.2	The Temperature Humidity Infrared Radiometer (THIR) Subsystem	1-3
1.3	The Surface Composition Mapping Radiometer (SCMR) Experiment	1-3
1.4	The Electrically Scanning Microwave Radiometer (ESMR) Experiment	1-3
1.5	The Infrared Temperature Profile Radiometer (ITPR) Experiment	1-5
1.6	The Selective Chopper Radiometer (SCR) Experiment	1-6
1.7	The Nimbus E Microwave Spectrometer (NEMS) Experiment	1-6
SECTION 2.	ORBITAL ELEMENTS AND DATA AVAILABILITY ON-OFF TIMES	2-1
SECTION 3.	ELECTRICALLY SCANNING MICROWAVE RADIOMETER DISPLAYS	3-1
SECTION 4.	TEMPERATURE HUMIDITY INFRARED RADIOMETER MONTAGES	4-1
4.1	THIR Nighttime Montages	4-3
4.2	THIR Daytime Montages	4-125
SECTION 5.	CORRECTIONS TO THE NIMBUS 5 USER'S GUIDE	5-1
5.1	THIR Corrections to the User's Guide	5-1
5.2	SCMR Corrections to the User's Guide	5-2
5.3	ESMR Corrections to the User's Guide	5-3
5.4	ITPR Corrections to the User's Guide	5-7
5.5	SCR Corrections to the User's Guide	5-10
5.6	NEMS Corrections to the User's Guide	5-11

LIST OF FIGURES

Figure		Page
1-1	Nimbus 5 Daytime THIR (11.5 μm channel) Image Recorded over the Western United States and Mexico on 20 June 1973	1-4
2-1	World Map	2-3
5-1	Weighting Functions of the Temperature Sounding Channels of the Nimbus 5 SCR	5-12

LIST OF TABLES

Table		Page
1-1	Nimbus 5 Catalog Documentation Summary	1-1
1-2	Nimbus 5 Pitch Bias History from Orbit 2290 (30 May 1973) through Orbit 3149 (2 August 1973)	1-2
1-3	ESMR Color Images from Launch through 31 July 1973 available at NSSDC	1-5
2-1	Nimbus 5 Brouwer Mean Orbital Elements for June and July 1973	2-1
2-2	Data Availability On-Off Times	2-5
3-1	ESMR Gray Scale Steps versus Brightness Temperature for Each of the Three Swaths in the ESMR Pictorial Displays	3-2
3-2	ESMR Display Format and Gray Scale Brightness Temperature Programs for June and July 1973	3-4
4-1	Latitude versus Minutes from Ascending or Descending Node	4-2
5-1	THIR Output Voltages versus Equivalent Blackbody Temperatures at Different Bolometer Temperatures for the 11.5 μm Channel	5-1
5-2	THIR Output Voltages versus Equivalent Blackbody Temperatures at Different Temperatures for the 6.7 μm Channel	5-2
5-3	Constants for Linear Correction of Brightness Temperatures Corresponding to ESMR Beam Positions	5-4
5-4	ITPR Calibration Constants for the Period 12/12/72 - 2/6/73	5-7
5-5	ITPR Calibration Constants for the Period 2/6/73 - 3/31/73	5-8
5-6	ITPR Calibration Constants for the Period 4/1/73 - 5/31/73	5-8
5-7	ITPR Calibration Constants for the Period 6/1/73 - 7/31/73	5-9
5-8	Correction Coefficients γ and aγ for the SCR Temperature Sounding Channels	5-10
5-9	SCR B Difference Channel Coefficients β	5-11

SECTION 1

SUMMARY OF OPERATIONS

1.1 Introduction

Nimbus 5 was successfully launched from the Western Test Range at Vandenberg AFB, California, into a near circular orbit (1089 km × 1102 km) at 07 hr. 56 min. 00 sec. GMT on 11 December 1972. All experiments and subsystems were successfully turned on. Satellite operations from launch (11 December) through orbit 103 (18 December) consisted of engineering evaluation of all spacecraft systems. Therefore, data reception, accountability, and processing were intermittent during that period. Table 1-1 is a summary of the documentation for each Nimbus 5 Data Catalog volume through volume 4.

Table 1-1

Nimbus 5 Catalog Documentation Summary

Volume	Coverage Dates	Orbits
1	19 Dec. 72 - 31 Jan. 73	104 - 693
2	1 Feb. 73 - 31 Mar. 73	694 - 1485
3	1 Apr. 73 - 31 May 73	1486 - 2304
4	1 June 73 - 31 July 73	2305 - 3123

The total operating time for each experiment from launch through orbit 3123 was as follows:

ESMR		4,745 hours	
ITPR		4,695 hours	
NEMS		4,700 hours	
SCR		4,699 hours	
THIR		4,700 hours	
SCMR:	direct	29 hours	(No usable SCMR data was
	recorded	6 hours	recorded after orbit 320.)

The spacecraft attitude in pitch was biased between +2.6 and +2.9 degrees throughout this catalog period. Table 1-2 shows when each was used. Previous volumes discuss the displacement of earth location points caused by the pitch bias.

The nadir location coordinates on ESMR, ITPR, SCR, and NEMS tapes are adjusted to correct for the pitch bias. Grid points on THIR and ESMR images are routinely

corrected to match the data points and the grids. Any grid that is still in error by more than 60 n. m. is identified in Table 2-2 under column headed by "Grid Correction." THIR and ESMR grid print maps, available through NSSDC, are also adjusted so that the data points and their coordinates match.

Table 1-2

Nimbus 5 Pitch Bias History
from orbit 2290 (30 May 1973) through orbit 3149 (2 August 1973)

DATE	ORBIT	+2.6°	+2.9°	DATE	ORBIT	+2.6°	+2.9°
30 May	2290		x	28 June	2672	x	
2 June	2326	x		29 June	2684		x
3 June	2339		x	1 July	2720	x	
6 June	2374	x		2 July	2733		x
7 June	2389		x	5 July	2765	x	
9 June	2423	x		6 July	2778		x
10 June	2436		x	9 July	2826	x	
12 June	2464	x		10 July	2836		x
13 June	2477		x	13 July	2880	x	
15 June	2505	x		14 July	2890		x
16 June	2515		x	18 July	2940	x	
18 June	2544	x		19 July	2955		x
19 June	2555		x	24 July	3017	x	
21 June	2584	x		25 July	3033		x
22 June	2595		x	29 July	3087	x	
25 June	2629	x		30 July	3102		x
25 June	2637		x	2 August	3149	+3.5°	

Roll and yaw attitude control have been within nominal limits during this period.

Data quality from both HDRSS recorders continues to be good. However, the amplitude of the flutter on HDRSS A has now (June) increased to twice that of HDRSS B. Thus, HDRSS A use is restricted to about one orbit per day.

The power, command/clock, Versatile Information Processor (VIP), and thermal subsystem performances continued to be satisfactory during this period.

Subsection 1.2 through 1.7 of this catalog summarize the operational highlights of the individual experiments and call attention to known data anomalies. Section 2 lists the time for which data was received and is available for study for each experiment. Section 3 and 4 show ESMR and THIR imagery, while Section 5 presents corrections to The Nimbus 5 User's Guide.

The user is referred to The Nimbus 5 User's Guide for a complete description of each experiment and to Section 1.7 of that Guide for the requesting procedure and sources for all data. Sections 2, 3, and 4 of this Data Catalog should help the user to select data to meet his needs.

1.2 The Temperature Humidity Infrared Radiometer (THIR) Subsystem

The quality of THIR data from both channels has been excellent. Root mean square (rms) THIR temperature variations, due to HDRSS tape recorder and system noise, appears to be about ±2° K for HDRSS B and ±4° K for HDRSS A. The higher HDRSS A value is attributed to flutter in that recorder system. Figure 1-1 is an example of the imagery from HDRSS B recorded over the Western United States and Mexico.

1.3 The Surface Composition Mapping Radiometer (SCMR) Experiment

The SCMR experiment collected and returned approximately 35 hours of instrument data during the first 320 orbits. Intermittent loss of a scan mirror synchronization pulse caused a loss of useful data output whenever this occurred. This synchronization problem progressed to the point where no useful data could be obtained after orbit 320 (4 January 1973).

Users who desire SCMR data or information should write to Dr. Warren G. Hovis, Code 940, Goddard Space Flight Center, Greenbelt, Maryland 20771.

1.4 The Electrically Scanning Microwave Radiometer (ESMR) Experiment

1.4.1 Performance

The ESMR instrument continued to perform normally from the beginning of this reporting period to orbit 3015 (23 July). Then, during orbit 3015, the instrument malfunctioned as it had during orbit 1062 (see volume 2). The instrument returned to normal operations during orbit 3019, but occasional malfunctions occurred throughout the remainder of July. Table 3-2 in Section 3 shows when the instrument was in each operation mode.

The malfunction reduces the ESMR instrument response to the range between 110° K and 220° K of brightness temperature. Its normal response range is between 110° K and about 300° K. The effect of the malfunction shifts the range to which the instrument can respond. There is no way to recover temperature data above 220° K. However, by applying offset corrections, temperature values below 220° K are considered to be accurate to within 10° K. Because many polar and atmospheric phenomena have brightness temperatures lower than 220° K, investigations of these phenomena will be only slightly affected by the loss of high brightness temperatures.

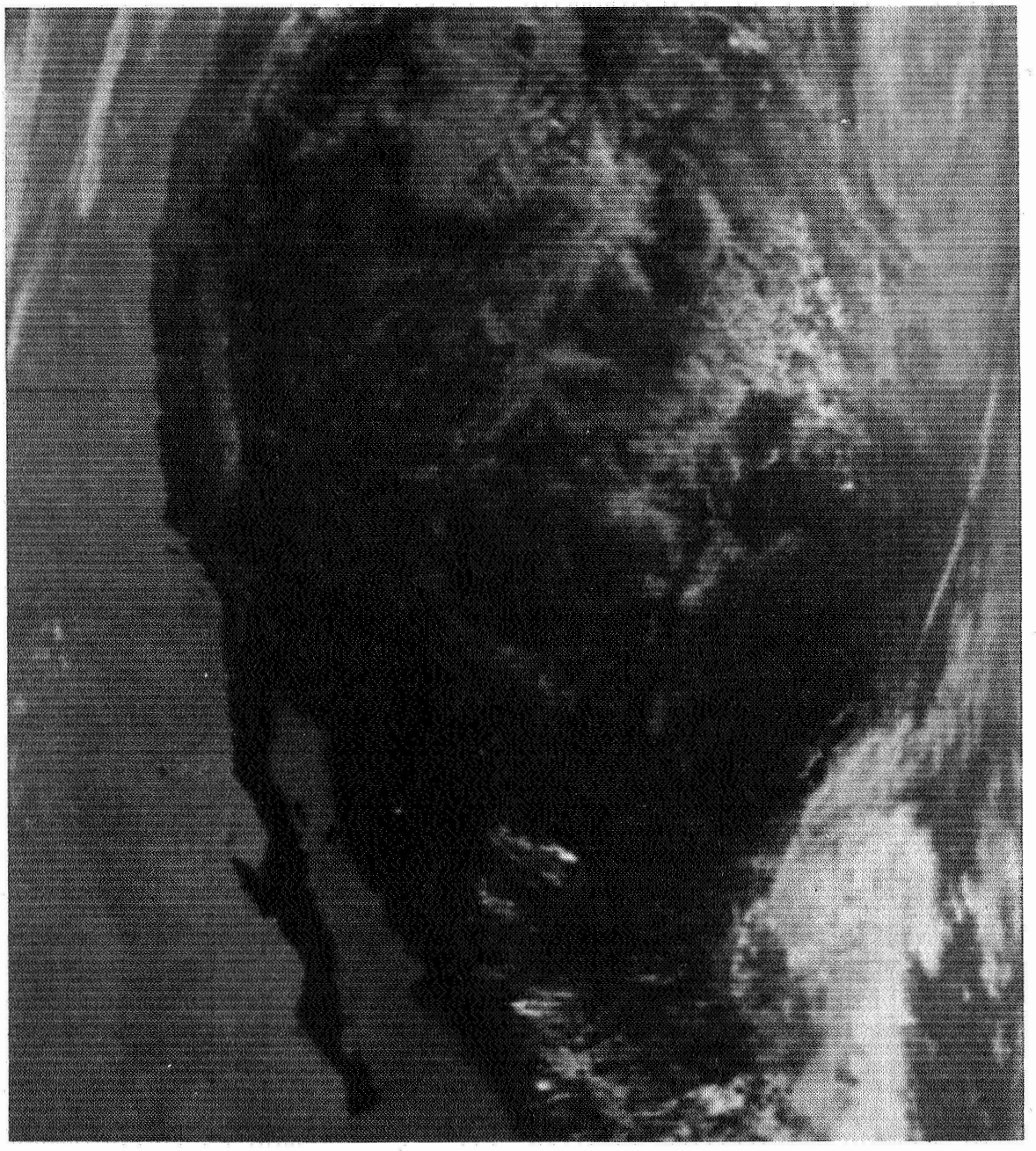


Figure 1-1 Nimbus 5 Daytime THIR (11.5 μm channel) Image Recorded over the Western United States and Mexico on 20 June 1973

On the ESMR image displays (Section 3) the effect of the temperature offset is to completely eliminate data information in swath 3, since its entire display temperature range, 254° K to 290° K, is above the new upper limit. Swath 2 temperature values range from 194° K to 266° K; thus, those values above 220° K are not shown at their true temperature. The offset does not affect values of Swath 1, as its temperature limits are 110° K and 200° K.

A semi-quantitive calibration algorithm has been developed for these offset data. These calibrated data, as well as the normal data, are available through NSSDC as described in The Nimbus 5 User's Guide.

1.4.2 ESMR False Color Images

Several computer-processed color images (8" × 10" size) have been produced. Each image is a composite of several consecutive orbits of data. Table 1-3 lists those available through NSSDC. Volume 2 shows two examples (in black and white) of these false color composites. The user is cautioned that several of the South Polar images have longitudes that are rotated 180°. Obvious terrestrial features can be used to obtain the correct grid orientation.

Table 1-3

ESMR Color Images From Launch Through 31 July 1973 Available at NSSDC

Projection: Polar Area: 60°N - 90°N	Projection: Polar Area: 60°S - 90°S	Projection: Mercator	
Date	Date	Area	Date
15 December 1972	15 December 1972	180°W - 180°E	12 Jan. 1973
24 December	24 December	60°S - 60°N	
2 January 1973	11 January 1973	130°E - 110°W	13 Jan.
11 January	21 January	50°S - 50°N	
30 January	30 January	20°E - 40°E	13 Jan.
10 February	10 February	10°N - 40°N	
26 February	26 February	130°E - 110°W	14 Jan.
21 June	4 March	50°S - 50°N	
1 July	15 March	60°E - 150°E	14 Jan.
21 July	26 March	0° - 60°N	
30 July	4 June	20°W - 60°E	18 Jan.
	21 June	0° - 75°N	
	1 July	60°W - 130°W	23 Jan.
	11 July	10°N - 60°N	
	21 July	60°E - 150°E	10 Feb.
	30 July	0° - 60°N	

1.5 The Infrared Temperature Profile Radiometer (ITPR) Experiment

The ITPR continued normal performance except for the scan mechanism. The scan motor heater was off for a "cold soak" period from orbit 2083 (15 May) until shortly before its operation in the scan mode during orbit 2555 (19 June). For the

remainder of this period the scan mode was exercised periodically with many orbits of good scan data, both day and night, having latitude coverage varying from 25° N - 15° S to 60° N - 60° S.

1.6 The Selective Chopper Radiometer (SCR) Experiment

The SCR instrument has remained in the normal operating mode since shortly after launch. Subsystem anomalies and channel gain changes have not significantly affected the usefulness of the data.

The SCR data is transmitted daily from Goddard Space Flight Center to the experimenter at Oxford, England. After processing and calibration, the data is output in several forms for analysis. Volumes 1 through 3 of this catalog series show several output forms and provide discussion of some of the results from analysis of the SCR data.

1.7 The Nimbus E Microwave Spectrometer (NEMS) Experiment

The NEMS instrument continued to perform well during this catalog period. The experimenter, at MIT, Cambridge, Massacheusetts, continues to receive all NEMS data and is using it for research. Examples and analysis of some of the output products are in volumes 1 through 3 of this catalog series.

SECTION 2

THE ORBITAL ELEMENTS AND DATA AVAILABILITY ON-OFF TIMES

The Nimbus 5 Brouwer Mean orbital elements for selected epochs during June and July 1973 are listed in Table 2-1.

Table 2-1

Nimbus 5 Brouwer Mean Orbital Elements
for June and July 1973

Epoch	Universal Time	10 June 73 00 00 00	24 June 73 00 00 00	10 July 73 00 00 00	22 July 73 00 00 00
Semi-Major Axis	Km	7473.560	7473.555	7473.553	7473.551
Eccentricity		.000875	.000908	.000918	.000900
Inclination	Degrees	99.943	99.940	99.939	99.938
Argument of Perigee	Degrees	155.601	123.827	86.362	59.468
Right Ascension of Ascending Node	Degrees	70.733	84.529	100.295	112.116
Height of Perigee	Km	1088.85	1088.65	1088.52	1088.62
Height of Apogee	Km	1101.94	1102.14	1102.25	1102.11
Anomalistic Period	Minutes	107.1640	107.1639	107.1638	107.1638
Motion of Perigee	Deg. per Day	-2.4341	-2.4343	-2.4344	-2.4346

The data availability on-off times (Table 2-2) list the times when the data from each instrument was recorded on a HDRSS.

THIR orbital coverage in Table 2-2 is divided between daytime and nighttime data. The THIR data is normally recorded simultaneously from both 6.7 μm and 11.5 μm channels. Therefore, the listed on-off times apply to both channels.

A THIR data orbit is defined as beginning and ending at the night-day terminator. Thus, the daytime data orbit extends from the night-day terminator to the day-night terminator. Each daytime THIR data orbit is assigned the orbit number of the ascending node which occurs during that portion of the orbit. The same orbit number is assigned also to the succeeding nighttime data orbit.

The "INT ORBIT & STDN" identify the orbit in which the satellite is interrogated and the ground station to which the satellite data is transmitted. The letter "R" denotes Rosman, North Carolina; the letter "A" denotes Fairbanks, Alaska.

The "HDRSS" identifies the satellite tape recorder, either A or B.

The "THIR GRID CORR" columns are used to indicate an image grid error in latitude and longitude whenever either is in error by more than one degree of great circle arc (60 n. m.). Latitude errors are suffixed by an N or S; longitude errors, by and E or W. An N or S indicates the grid should be moved up or down by the amount shown to obtain a good fit of the grid to the geography. An E or W indicates the grid should be moved right or left, at the equator, by the amount shown.

Ascending node times and longitudes are the times and longitudes at which the satellite crosses the equator in the northbound direction. These crossings always occur during the daytime portion of the orbit. The descending nodes and times refer to the southbound crossings, which occur during the nighttime portion of the orbit.

ESMR, NEMS, SCR, and ITPR are normally on all the time. Their sensory information is recorded on a HDRSS between interrogations, and their on-and-off times define the total record times between interrogations. An interrogation orbit is the orbit during which previously recorded data is transmitted to a ground station. This data will be from segments of two or more data orbits as defined above for THIR. To determine the orbital coverage of the data from any interrogation, the on-and-off times should be matched with the appropriate ascending or descending node listed with the THIR information on the same page of Table 2-2. Coverage can then be determined as described below.

The "DATA ORBIT" indicator in the ESMR table is given only for reference purposes. It is the number which appears on the data display image, samples of which are reproduced in Section 3, and indentifies the last data orbit on each display. It should not be confused with the THIR data orbit number.

Table 2-2 together with the World Map (Figure 2-1) and the vellum Subsatellite Tracks Overlay attached to the back of this catalog, can be used to determine approximate geographic coverages.

A Subsatellite Tracks Overlay is correctly oriented with the World Map when the ascending or descending node line on the overlay coincides with the 0-degree latitude (equator) line of the World Map. Orbital coverage is determined by placing an orbit track on the world map at the appropriate ascending node (for daytime) or descending node (for nighttime) longitude for the orbit of interest.

The Subsatellite Tracks Overlay contains 14 correctly spaced tracks, which end at the approximate earth day-night transitions. The tracks contain time ticks spaced 5

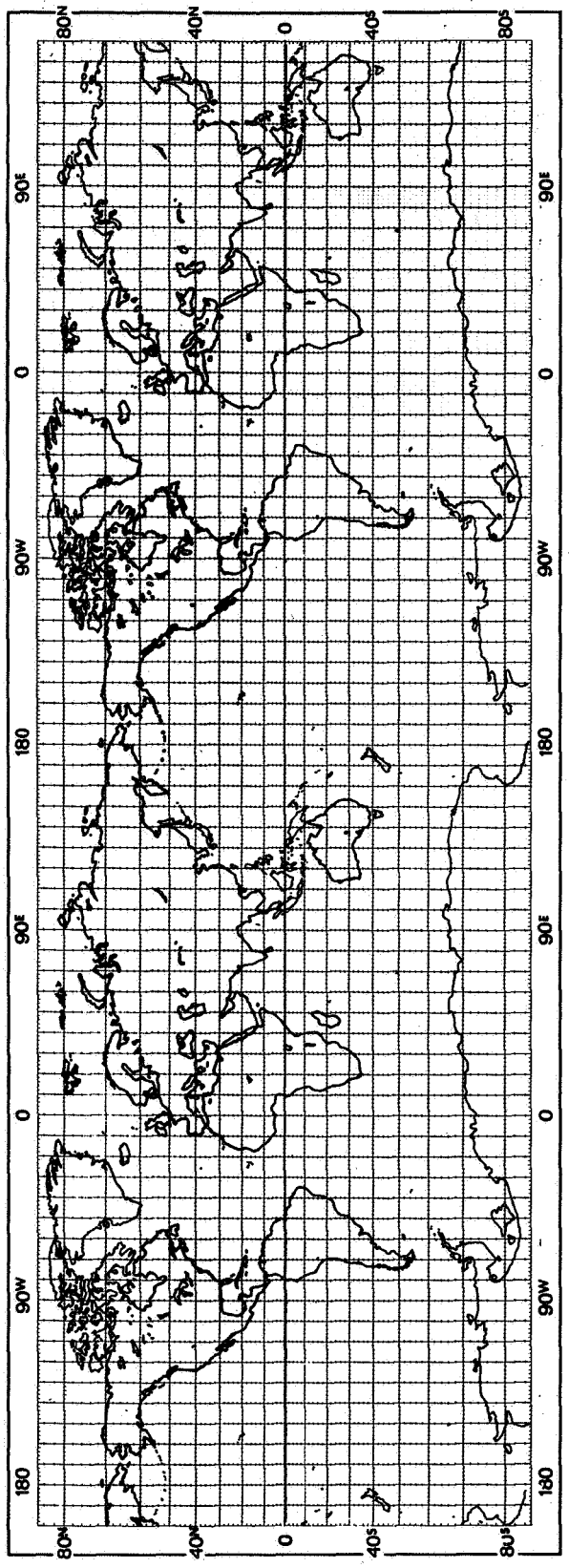


Figure 2-1 World Map

minutes apart, appropriately annotated at the edge of the overlay, referenced from the equator. Times in minutes from equator crossings for all or part of a particular orbit are calculated by adding to or subtracting from the ascending or descending node time listed for that orbit in the Data Availability On-Off Times Table.

The nature and format of the data to be available from each experiment are explained in detail in the respective sections of The Nimbus 5 User's Guide. The appropriate sources for requesting the various data types are listed in Section 1.7 of the same manual.

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
1 JUNE 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2305						002229	E167.0	2306	0054	0248	2307R	A
2306	0151	0240	2307R	A	1N	020946	E140.1	2307	0248	0434	2307R	B
2307	0338	0427	2307R	B	1N	035702	E113.3	2308	0440	0629	2309A	B
2308	0525	0614	2309A	B	1N	054419	E086.5	2309	0621	0809	2310A	A
2309	0713	0802	2310A	A		073135	E059.7	2310	0809	0945	2310A	B
2310	0900	0947	2310A	B	1N	091852	E032.9	2311	0953	1132	2311A	B
2311	1047	1133	2311A	B	1N	110608	E006.0	2312	1139	1322	2312A	B
2312	1235	1322	2312A	B	1W	125325	W020.8	2313	1328	1507	2313A	B
2313	1422	1507	2313A	B		144041	W047.6	2314	1514	1648	2314A	B
2314	1609	1648	2314A	B	1W	162758	W074.4	2315	1653	1830	2315A	B
2315	1756	1831	2315A	B	1N	181514	W101.2	2316	1836	2017	2316A	B
2315	1836	1845	2316A	B				2317	2022	2204	2317A	B
2316	1944	2017	2316A	B		200231	W128.1	2318	2209	0007	2319R	A
2316	2023	2032	2317A	B								
2317	2131	2204	2317A	B		214947	W154.9					
2317	2209	2220	2321R	A								
2318	2318	0007	2321R	A		233704	E178.3					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2305	0054	0151	2307R	A	1S	011603	W026.4		0054	0248	2307R	A
2306	0240	0248	2307R	A	1S	030319	W053.3		0249	0433	2307R	B
2306	0249	0338	2307R	B	1S				0439	0629	2309A	B
2307	0427	0434	2307R	B	1S	045036	W080.1		0621	0810	2310A	A
2307	0440	0525	2309A	B	1S				0809	0946	2310A	B
2308	0614	0629	2309A	B	1S	063753	W106.9		0952	1133	2311A	B
2308	0621	0713	2310A	A					1139	1323	2312A	B
2309	0802	0809	2310A	A		082509	W133.7		1328	1507	2313A	B
2309	0809	0900	2310A	B	1S				1513	1648	2314A	B
2310	0952	1047	2311A	B	1S	101226	W160.5		1653	1831	2315A	B
2311	1139	1235	2312A	B	1E	115942	E172.6		1836	2017	2316A	B
2312	1328	1422	2313A	B		134659	E145.8		2022	2204	2317A	B
2313	1513	1609	2314A	B	1E	153415	E119.0		2209	0007	2321R	A
2314	1658	1756	2315A	B	1S	172132	E092.2					
2315	1845	1944	2316A	B		190848	E065.4					
2316	2032	2131	2317A	B		205605	E038.5					
2317	2220	2318	2321R	A		224321	E011.7					
2318						003038	W015.1					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
2 JUNE 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2319						012421	E151.5	2320	0156	0352	2321R	B
2320	0253	0342	2320R	B	1N	031137	E124.7	2321	0358	0528	2321R	B
2321	0440	0529	2321R	B		045854	E097.8	2323	0725	0904	2323A	B
2322	0627	0716	2322A	B		064610	E071.0	2324	0909	1048	2324A	B
2323	0815	0903	2323A	B	1N	083327	E044.2	2325	1054	1235	2325A	B
2324	1002	1048	2324A	B	1N	102043	E017.4	2326	1241	1419	2326A	B
2325	1149	1235	2325A	B		120800	W009.4	2327	1425	1604	2327A	B
2326	1337	1420	2326A	B		135516	W036.3	2328	1609	1747	2328A	B
2327	1542	1604	2327A	B		154233	W063.1	2329	1752	1932	2329A	B
2328	1711	1747	2328A	B		172949	W089.9	2330	1938	2107	2330A	B
2328	1752	1800	2329A	B				2330	2114	2118	2330A	B
2329	1858	1932	2329A	B		191706	W116.7	2331	2123	2307	2331A	B
2329	1939	1947	2330A	B								
2330	2046	2118	2330A	B		210422	W143.5					
2330	2123	2134	2331A	B								
2331	2233	2307	2331A	B		225139	W170.4					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2319	0156	0253	2320R	B	1S	021754	W041.9		0155	0352	2320R	B
2320	0342	0351	2320R	B	1S	040511	W068.7		0358	0529	2321R	B
2320	0358	0440	2321R	B					0725	0904	2323A	B
2321	0539	0627	2322A	B		055227	W095.6		0909	1049	2324A	B
2322	0725	0815	2323A	B	1S	073944	W122.4		1053	1236	2325A	B
2323	0909	1002	2324A	B	1S	092700	W149.2		1241	1420	2326A	B
2324	1054	1149	2325A	B		111417	W176.0		1425	1604	2327A	B
2325	1241	1337	2326A	B		130133	E157.2		1609	1747	2328A	B
2326	1425	1524	2327A	B		144850	E130.4		1752	1933	2329A	B
2327	1613	1711	2328A	B		163607	E103.5		1938	2118	2330A	B
2328	1800	1858	2329A	B		182323	E076.7		2123	2307	2331A	B
2329	1947	2046	2330A	B		201040	E049.9					
2330	2134	2233	2331A	B		215756	E023.1					
2331						234513	W003.8					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
3 JUNE 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2332						003856	E162.9	2333	0111	0302	2334R	A
2333	0207	0256	2334R	A	1N	022612	E136.0	2334	0303	0450	2334R	B
2334	0355	0444	0334R	B		041329	E109.2	2335	0456	0644	2336A	A
2335	0542	0631	2336A	B		060045	E082.4	2336	0639	0820	2336A	B
2336	0729	0818	2336A	A		074802	E055.6	2337	0823	1004	2337A	B
2337	0917	1004	2337A	B	1N	093518	E028.8	2338	1009	1150	2338A	B
2338	1104	1150	2338A	B	1N	112235	E001.9	2339	1156	1331	2339A	B
2339	1251	1336	2339A	B		130951	W024.9	2340	1337	1521	2340A	B
2340	1438	1521	2340A	B	1N	145708	W051.7	2341	1526	1703	2341A	B
2341	1626	1702	2341A	B		164424	W078.5	2342	1708	1847	2342A	B
2341	1708	1715	2342A	B				2343	1852	2033	2343A	B
2342	1813	1847	2342A	B		183141	W105.4	2344	2038	2224	2344A	B
2342	1853	1902	2343A	B								
2343	2000	2033	2343A	B		201857	W132.2					
2343	2039	2049	2344A	B								
2344	2148	2223	2344A	B		220614	W159.0					
2345						235331	E174.2					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2332	0111	0207	2334R	A	1S	013229	W030.6		0111	0303	2334R	A
2333	0256	0303	2334R	A	1S	031946	W057.4		0303	0451	2334R	B
2333	0304	0355	2334R	B					0456	0645	2336A	B
2334	0444	0450	2334R	B		050702	W084.2		0639	0739	2336A	A
2334	0456	0542	2336A	B					0823	1005	2337A	B
2335	0631	0644	2336A	B		065419	W111.0		1010	1151	2338A	B
2335	0639	0729	2336A	A					1156	1337	2339A	B
2336	0824	0917	2337A	B	1S	084135	W137.8		1342	1521	2340A	B
2337	1010	1104	2338A	B	1S	102852	W164.6		1526	1702	2341A	B
2338	1156	1251	2339A	B		121608	E168.5		1708	1847	2342A	B
2339	1342	1438	2340A	B	1S	140325	E141.7		1852	2032	2343A	B
2340	1527	1626	2341A	B		155041	E114.9		2038	2224	2344A	B
2341	1715	1813	2342A	B		173758	E088.1					
2342	1902	2000	2343A	B		192514	E061.3					
2343	2049	2148	2344A	B		211231	E034.4					
2344						225947	E007.6					
2345						004704	W019.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
4 JUNE 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2346						014047	E147.4	2347	0224	0424	2347R	B
2347	0309	0358	2349A	B	1N	032804	E120.6	2349	0558	0738	2349A	B
2348						051520	E093.7	2350	0739	0917	2350A	B
2349	0644	0733	2350A	A		070237	E066.9	2351	0924	1103	2351A	B
2350	0831	0918	2350A	B	1N	084953	E040.1	2352	1110	1253	2352A	B
2351	1018	1104	2351A	B		103710	E013.3	2353	1259	1437	2353A	B
2352	1206	1253	2352A	B		122426	W013.6	2354	1443	1620	2354A	B
2353	1353	1436	2353A	B		141143	W040.4	2355	1626	1756	2355A	B
2354	1540	1620	2354A	B		155859	W067.2	2356	1811	1951	2356A	B
2355	1728	1805	2355A	B	1N	174616	W094.0	2357	1956	2134	2357A	B
2356	1915	1950	2356A	B		193332	W120.8	2358	2140	2227	2358A	B
2356	1956	2004	2357A	B								
2357	2102	2135	2357A	B		212049	W147.7					
2357	2141	2151	2358A	B								
2358	2249	2326	2358A	B		230806	W174.5					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2346	0222	0309	2349A	B	1S	023421	W046.0	0221	0422	2349A	B	
2347	0358	0423	2349A	B	1S	042137	W072.8	0558	0739	2350A	A	
2348	0558	0644	2350A	B		060854	W099.7	0739	0918	2350A	B	
2349	0733	0739	2350A	B		075610	W126.5	0924	1104	2351A	B	
2349	0740	0831	2350A	B	1S			1110	1254	2352A	B	
2350	0924	1018	2351A	B		094327	W153.3	1259	1437	2353A	B	
2351	1110	1206	2352A	B		113043	E179.9	1443	1621	2354A	B	
2352	1259	1353	2353A	B		131800	E153.1	1626	1806	2355A	B	
2353	1443	1540	2354A	B		150516	E126.2	1811	1951	2356A	B	
2354	1629	1728	2355A	B	1S	165233	E099.4	1956	2135	2357A	B	
2355	1816	1915	2356A	B		183949	E072.6	2140	2327	2358A	B	
2356	2004	2102	2357A	B		202706	E045.8					
2357	2151	2249	2358A	B		221422	E019.0					
2358						000139	W007.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
5 JUNE 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE					INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
2359						005522	158.7E	2360	0127	0317	2361R	A
2360	0224	0313	2361R	A	1E	024239	131.9E	2361	0318	0506	2361R	B
2361	0411	0500	2361R	B		042955	105.1E	2362	0511	0700	2363A	A
2362	0559	0647	2363A	B		061712	078.3E	2363	0645	0733	2363A	B
2363	0746	0835	2363A	A		080428	051.5E	2363	0746	0838	2363A	B
2364	0933	1020	2364A	B		095145	024.6E	2364	0840	1020	2364A	B
2365	1120	1206	2365A	B		113901	002.2W	2365	1026	1206	2365A	B
2366	1308	1354	2366A	B		132618	029.0W	2366	1212	1354	2366A	B
2367	1455	1536	2367A	B		151334	055.8W	2367	1359	1537	2367A	B
2368	1642	1720	2368A	B		170051	082.6W	2368	1542	1720	2368A	B
2368	1725	1731	2369A	B				2369	1725	1902	2369A	B
2369	1829	1902	2369A	B		184807	109.4W	2370	1909	2052	2370A	B
2369	1908	1918	2370A	B				2371	2057	2240	2371A	B
2370	2017	2052	2370A	B		203524	136.3W					
2370	2057	2106	2371A	B								
2371	2204	2240	2371A	B		222241	163.1W					
2371	2242	2253	2374R	A								
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2359	0127	0224	2361R	A	1W	014855	034.7W		0127	0318	2361R	A
2360	0318	0411	2361R	B		033612	061.5W		0318	0506	2361R	B
2361	0500	0506	2361R	B		052328	088.3W		0511	0700	2363A	B
2361	0512	0559	2363A	B					0655	0839	2363A	A
2362	0647	0659	2363A	B		071045	115.1W		0840	1021	2364A	B
2362	0654	0733	2363A	A					1026	1207	2365A	B
2363	0840	0933	2364A	B		085802	141.9W		1211	1354	2366A	B
2364	1026	1120	2365A	B		104518	168.8W		1359	1537	2367A	B
2365	1211	1308	2366A	B		123235	164.4E		1542	1720	2368A	B
2366	1400	1455	2367A	B		141951	137.6E		1725	1903	2369A	B
2367	1544	1642	2368A	B		160708	110.8E		1907	2052	2370A	B
2368	1731	1829	2369A	B		175424	084.0E		2057	2241	2371A	B
2369	1918	2017	2370A	B		194141	057.2E		2242	0040	2374R	A
2370	2106	2204	2371A	B		212857	030.3E					
2371	2253	2351	2374R	A		231614	003.5E					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
6 JUNE 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2372	2351	0039	2374R	A		000957	170.1E	2372	2242	0040	2372R	A
2373						015714	143.3E	2374	0237	0422	2374R	B
2374	0326	0415	2374R	B		034430	116.4E	2375	0430	0618	2376A	B
2375	0513	0602	2376A	B		053147	089.6E	2376	0609	0755	2376A	A
2376	0700	0749	2377A	A		071903	062.8E	2377	0756	0935	2377A	B
2377	0848	0934	2377A	B		090620	036.0E	2378	0944	1123	2378A	B
2378	1035	1122	2378A	B		105336	009.2E	2379	1128	1307	2379A	B
2379	1221	1307	2379A	B		124053	017.7W	2380	1313	1454	2380A	B
2380	1410	1454	2380A	B		142809	044.5W	2381	1500	1636	2381A	B
2381	1557	1636	2381A	B		161526	071.3W	2382	1642	1819	2382A	B
2382	1744	1819	2382A	B		180242	098.1W	2383	1825	2003	2383A	B
2382	1825	1833	2383A	B				2384	2010	2152	2384A	B
2383	1931	2003	2383A	B		194959	124.9W					
2383	2008	2020	2384A	B								
2384	2119	2152	2384A	B		213716	151.8W					
2385						232432	178.6W					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2372						010330	023.3W	0237	0422	2374R	B	
2373	0237	0326	2374R	B		025047	050.1W	0430	0618	2376A	B	
2374	0415	0422	2374R	B		043803	076.9W	0604	0756	2377A	A	
2374	0430	0513	2376A	B				0756	0935	2377A	B	
2375	0602	0618	2376A	B		062520	103.8W	0939	1123	2378A	B	
2375	0609	0700	2377A	A				1128	1307	2379A	B	
2376	0749	0755	2377A	A		081236	130.6W	1313	1455	2380A	B	
2376	0756	0848	2377A	B				1500	1637	2381A	B	
2377	0939	1035	2378A	B		095953	157.4W	1641	1820	2382A	B	
2378	1128	1222	2379A	B		114709	175.8E	1825	2003	2383A	B	
2379	1313	1410	2380A	B		133426	149.0E	2008	2153	2384A	B	
2380	1500	1557	2381A	B		152142	122.1E					
2381	1646	1744	2382A	B		170859	095.3E					
2382	1833	1931	2383A	B		185616	068.5E					
2383	2020	2119	2384A	B		204332	041.7E					
2384						223049	014.9E					
2385						001805	012.0W					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
7 JUNE 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2386						011149	154.6E	2387	0143	0342	2387A	A
2387	0240	0329	2390A	A		025905	127.8E	2388	0341	0526	2388R	B
2388	0428	0517	2388R	B		044622	101.0E	2389	0532	0711	2389R	B
2389	0615	0704	2389R	B		063338	074.2E	2390	0717	0830	2390A	B
2390	0802	0849	2390A	B		082055	047.3E	2391	0855	1031	2391A	B
2391	0950	1036	2391A	B		100811	020.5E	2392	1042	1224	2392A	B
2392	1137	1224	2392A	B		115528	006.3W	2393	1229	1355	2393A	B
2393	1324	1408	2393A	B		134244	033.1W	2394	1413	1553	2394A	B
2394	1511	1551	2394A	B	1N	153001	060.0W	2395	1557	1737	2395A	B
2395	1659	1736	2395A	B	1W	171717	086.8W	2396	1742	1924	2396A	B
2395	1742	1748	2396A	B				2397	1930	2107	2397A	B
2396	1846	1924	2396A	B		190434	113.6W	2398	2112	2257	2398A	B
2396	1930	1935	2397A	B								
2397	2033	2107	2397A	B		205151	140.4W					
2397	2113	2122	2398A	B								
2398	2221	2258	2398A	B		223907	167.2W					
2398	2259	2309	2404A	A								
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2386	0144	0240	2390A	A		020522	038.8W		0143	0342	2390A	A
2387	0329	0342	2390A	A		035238	065.6W		0341	0526	2388R	B
2387	0342	0428	2388R	B					0531	0712	2389R	B
2388	0517	0526	2388R	B		053955	092.4W		0717	0831	2390A	B
2388	0532	0615	2389R	B					0854	1037	2391A	B
2389	0704	0712	2389R	B		072711	119.2W		1042	1224	2392A	B
2389	0718	0802	2390A	B					1229	1409	2393A	B
2390	0855	0950	2391A	B		091428	146.1W		1413	1552	2394A	B
2391	1042	1137	2392A	B		110144	172.9W		1556	1737	2395A	B
2392	1229	1324	2393A	B		124901	160.3E		1742	1925	2396A	B
2393	1413	1511	2394A	B	1S	143617	133.5E		1930	2108	2397A	B
2394	1600	1659	2395A	B	1E	162334	106.7E		2112	2258	2398A	B
2395	1748	1846	2396A	B		181050	079.9E		2259	0057	2404A	A
2396	1935	2033	2397A	B		195807	053.0E					
2397	2122	2221	2398A	B		214523	026.2E					
2398	2309	0008	2404A	A		233240	000.6W					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
8 JUNE 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2399	0008	0057	2404A	A		002624	166.0E	2399	2259	0058	2404A	A
2400						021340	139.2E	2401	0253	0440	2401R	B
2401	0342	0431	2401R	B		040057	122.3E	2402	0456	0526	2402R	B
2402	0530	0618	2402R	B	1N	054813	085.5E	2403	0731	0807	2403A	B
2403	0717	0806	2403A	B		073530	058.7E	2404	0812	0950	2404A	B
2404	0904	0950	2404A	B		092246	031.9E	2405	0957	1138	2405A	B
2405	1051	1138	2405A	B		111003	005.1E	2406	1143	1325	2406A	B
2406	1239	1324	2406A	B		125719	021.8W	2407	1330	1513	2407A	B
2407	1426	1513	2407A	B		144436	048.6W	2408	1518	1652	2408A	B
2408	1613	1652	2408A	B		163152	075.4W	2409	1657	1836	2409A	B
2408	1657	1702	2409A	B				2410	1841	2021	2410A	B
2409	1801	1836	2409A	B		181909	102.2W	2411	2028	2208	2411A	B
2409	1841	1849	2410A	B								
2410	1948	2021	2410A	B		200626	129.0W					
2410	2027	2037	2411A	B								
2411	2135	2208	2411A	B		215342	155.9W					
2412						234059	177.3E					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2399						011956	027.4W	0253	0440	2401R	B	
2400	0253	0342	2401R	B		030713	054.3W	0446	0626	2402R	B	
2401	0431	0440	2401R	B		045430	081.1W	0631	0807	2403A	B	
2401	0446	0530	2402R	B	1S			0812	0951	2404A	B	
2402	0618	0626	2402R	B	1S	064146	107.9W	0955	1339	2405A	B	
2402	0631	0717	2403A	B				1143	1325	2406A	B	
2403	0812	0904	2404A	B		082903	134.7W	1330	1514	2407A	B	
2404	0956	1051	2405A	B		101619	161.5W	1518	1652	2408A	B	
2405	1144	1239	2406A	B		120336	171.7E	1657	1837	2409A	B	
2406	1330	1426	2407A	B		135052	144.9E	1841	2021	2410A	B	
2407	1519	1613	2408A	B		153809	118.0E	2026	2209	2411A	B	
2408	1702	1801	2409A	B		172525	091.2E					
2409	1849	1948	2410A	B		191242	064.4E					
2410	2037	2135	2411A	B		205958	037.6E					
2411						224715	010.8E					
2412	0013	0110	2415R	A		003431	016.1W					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
9 JUNE 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2413	0110	0159	2415R	A		012815	E150.5	2413	0013	0203	2415R	A
2414	0257	0346	2414R	B		031532	E123.7	2414	0159	0357	2414R	B
2415	0444	0533	2415R	B		050248	E098.9	2415	0403	0536	2415R	B
2416	0631	0720	2416A	B		065005	E070.0	2416	0543	0721	2416A	B
2417	0819	0905	2417A	B		083721	E043.2	2417	0726	0905	2417A	B
2418	1006	1052	2418A	B		102438	E016.4	2418	0912	1053	2418A	B
2419	1153	1240	2419A	B		121154	W010.4	2419	1058	1236	2419A	B
2420	1341	1421	2420A	B		135911	W037.2	2420	1246	1422	2420A	B
2421	1528	1607	2421A	B		154627	W064.1	2421	1431	1607	2421A	B
2422	1715	1751	2422A	B		173344	W090.9	2422	1612	1751	2422A	B
2422	1756	1804	2423A	B				2423	1756	1937	2423A	B
2423	1902	1936	2423A	B		192100	W117.7	2424	1942	2123	2424A	B
2423	1941	1951	2424A	B				2425	2128	2318	2425A	B
2424	2050	2123	2424A	B		210817	W144.5					
2424	2129	2139	2425A	B								
2425	2237	2313	2425A	B		225534	W171.3					
2425	2315	2326	2428R	A								
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2413	0200	0257	2414R	B		022148	W042.9	0013	0203	2415R	A	
2414	0346	0357	2414R	B		040904	W069.7	0200	0358	2414R	B	
2414	0403	0444	2415R	B				0403	0537	2415R	B	
2415	0543	0631	2416A	B		055621	W096.5	0543	0721	2416A	B	
2416	0726	0819	2417A	B		074337	W123.3	0726	0906	2417A	B	
2417	0910	1006	2418A	B		093054	W150.2	0910	1054	2418A	B	
2418	1058	1153	2419A	B		111811	W177.0	1058	1237	2419A	B	
2419	1246	1341	2420A	B		130527	E156.2	1246	1422	2420A	B	
2420	1431	1528	2421A	B		145244	E129.4	1431	1607	2421A	B	
2421	1617	1715	2422A	B		164000	E102.5	1612	1751	2422A	B	
2422	1804	1902	2423A	B		182717	E075.7	1756	1937	2423A	B	
2423	1951	2050	2424A	B		201433	E048.9	1942	2124	2424A	B	
2424	2139	2237	2425A	B		220150	E022.1	2128	2314	2425A	B	
2425	2326	0024	2428R	A		234906	W004.7	2315	0113	2428R	A	

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
10 JUNE 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE					INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
2426	0024	0113	2428R	A		004250	E161.8	2426	2315	0113	2428R	A
2427						023007	E135.0	2428	0307	0454	2428R	B
2428	0359	0448	2428R	B		041723	E108.2	2429	0459	0642	2429R	B
2429	0546	0635	2429R	B		060440	E081.4	2430	0647	0822	2430A	B
2430	0733	0822	2430A	B		075156	E054.6	2431	0829	1006	2431A	B
2431	0921	1006	2431A	B	1W	093913	E027.8	2432	1013	1154	2432A	B
2432	1108	1154	2432A	B		112629	E001.0	2433	1159	1340	2433A	B
2433	1255	1340	2433A	B		131346	W025.9	2434	1346	1524	2434A	B
2434	1442	1524	2434A	B		150102	W052.7	2435	1530	1707	2435A	B
2435	1630	1707	2435A	B				2436	1712	1852	2436A	B
2435	1713	1719	2436A	B		164819	W079.5	2437	1857	2038	2437A	B
2436	1817	1852	2436A	B				2438	2043	2224	2438A	B
2436	1857	1906	2437A	B		183535	W106.3					
2437	2004	2037	2437A	B								
2437	2043	2053	2438A	B		202252	W133.1					
2438	2152	2224	2438A	B		221009	W160.0					
2439						235725	E173.2					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2426						013623	W031.6		0307	0454	2428R	B
2427	0308	0359	2428R	B		032339	W058.4		0459	0642	2429R	B
2428	0448	0454	2428R	B		051056	W085.2		0647	0823	2430A	B
2428	0500	0546	2429R	B					0829	1006	2431A	B
2429	0635	0642	2429R	B		065812	W112.0		1011	1155	2432A	B
2429	0648	0733	2430A	B					1159	1341	2433A	B
2430	0829	0921	2431A	B	1E	084529	W138.8		1346	1525	2434A	B
2431	1011	1108	2432A	B		103245	W165.6		1530	1708	2435A	B
2432	1200	1255	2433A	B		122002	E167.6		1713	1852	2436A	B
2433	1346	1442	2434A	B		140718	E140.8		1857	2038	2437A	B
2434	1531	1630	2435A	B		155435	E113.9		2043	2225	2438A	B
2435	1719	1817	2436A	B		174151	E087.1					
2436	1906	2004	2437A	B		192908	E060.3					
2437	2053	2152	2438A	B		211625	E033.5					
2438						230341	E006.7					
2439						005058	W020.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
11 JUNE 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2440						014442	E146.4	2441	0224	0428	2441R	B
2441	0313	0402	2443A	B		033158	E119.6	2443	0602	0744	2443A	B
2442						051915	E092.8	2444	0745	0922	2444A	B
2443	0648	0737	2444A	A		070631	E065.9	2445	0928	1109	2445A	B
2444	0835	0922	2444A	B		085348	E039.1	2446	1115	1256	2446A	B
2445	1023	1109	2445A	B		104104	E012.3	2447	1301	1441	2447A	B
2446	1210	1256	2446A	B		122821	W014.5	2448	1446	1623	2448A	B
2447	1357	1441	2447A	B		141537	W041.3	2449	1629	1808	2449A	B
2448	1544	1623	2448A	B		160254	W068.2	2450	1813	1953	2450A	B
2449	1732	1808	2449A	B		175010	W095.0	2451	1959	2144	2451A	B
2449	1813	1820	2450A	B				2452	2144	2343	2452R	A
2450	1919	1953	2450A	B		193727	W121.8					
2450	2000	2008	2451A	B	1W							
2451*	2106	2144	2451A	B	1W	212444	W148.6					
2451	2148	2155	2455R	A								
2452	2254	2343	2455R	A		231200	W175.5					

*NO 6.7 DATA

NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR			
2440	0226	0313	2443A	B		023814	W047.0	0226	0428	2443A	B
2441	0402	0427	2443A	B		042531	W073.8	0602	0744	2444A	A
2442	0602	0648	2444A	A		061247	W100.6	0745	0922	2444A	B
2443	0737	0744	2444A	A		080004	W127.4	0927	1110	2445A	B
2443	0746	0835	2444A	B				1115	1256	2446A	B
2444	0928	1023	2445A	B		094720	W154.3	1301	1442	2447A	B
2445	1115	1210	2446A	B		113437	E178.9	1446	1624	2448A	B
2446	1302	1357	2447A	B		132153	E152.1	1629	1809	2449A	B
2447	1447	1544	2448A	B		150910	E125.3	1813	1954	2450A	B
2448	1633	1732	2449A	B		165626	E098.4	1959	2145	2451A	B
2449	1820	1919	2450A	B		184343	E071.6	2145	2343	2455R	A
2450*	2008	2106	2451A	B	1E	203059	E044.8				
2451	2155	2254	2455R	A		221816	E018.0				
2452						000532	W008.8				

*NO 6.7 DATA BETWEEN 2019 AND 2106

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
12 JUNE 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE TIME	LONG				INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	HRMNSS	DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
2453						005917	E157.7	2455	0319	0509	2455R	B
2454						024633	E130.9	2456	0515	0659	2456R	B
2455	0415	0504	2455R	B	1N	043350	E104.1	2457	0704	0838	2457A	B
2456	0603	0651	2456R	B	1N	062106	E077.3	2458	0844	1025	2458A	B
2457	0750	0838	2457A	B		080823	E050.5	2459	1030	1211	2459A	B
2458	0937	1025	2458A	B		095539	E023.6	2460	1216	1356	2460A	B
2459	1124	1211	2459A	B		114256	W003.2	2461	1401	1541	2461A	B
2460	1312	1356	2460A	B		133012	W030.0	2462	1546	1725	2462A	B
2461	1459	1540	2461A	B		151729	W056.8	2463	1730	1909	2463A	B
2462	1646	1725	2462A	B		170445	W083.7	2464	1914	2055	2464A	B
2462	1730	1735	2463A	B				2465	2100	2242	2465A	B
2463	1833	1908	2463A	B		185202	W110.5					
2463	1914	1922	2464A	B								
2464	2021	2055	2464A	B		203918	W137.3					
2464	2100	2110	2465A	B								
2465	2208	2242	2465A	B		222635	W164.1					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2453						015249	W035.7		0321	0510	2455R	B
2454	0322	0415	2455R	B	1S	034005	W062.5		0515	0659	2456R	B
2455	0504	0509	2455R	B	1S	052722	W089.3		0704	0839	2457A	B
2455	0515	0603	2456R	B	1S				0844	1026	2458A	B
2456	0651	0659	2456R	B	1S	071439	W116.1		1030	1211	2459A	B
2456	0704	0750	2457A	B					1216	1357	2460A	B
2457	0844	0937	2458A	B		090155	W142.9		1401	1541	2461A	B
2458	1030	1124	2459A	B		104912	W169.8		1546	1725	2462A	B
2459	1216	1312	2460A	B		123628	E163.4		1730	1909	2463A	B
2460	1401	1459	2461A	B		142345	E136.6		1914	2055	2464A	B
2461	1548	1646	2462A	B		161101	E109.8		2100	2243	2465A	B
2462	1735	1833	2463A	B		175818	E083.0					
2463	1922	2021	2464A	B		194534	E056.2					
2464	2110	2208	2465A	B		213251	E029.4					
2465						232007	E002.5					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
13 JUNE 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2466						001352	E169.1	2467	0047	0240	2468R	A
2467	0143	0231	2468R	A		020108	E142.3	2468	0241	0425	2468R	B
2468	0330	0419	2468R	B		034825	E115.5	2469	0431	0611	2469R	B
2469	0517	0606	2469R	B		053541	E088.7	2470	0617	0753	2470A	B
2470	0704	0753	2470A	B		072258	E061.8	2471	0759	0941	2471A	B
2471	0852	0940	2471A	B		091014	E035.0	2472	0946	1126	2472A	B
2472	1039	1126	2472A	B		105731	E008.2	2473	1131	1312	2473A	B
2473	1226	1311	2473A	B		124447	W018.6	2474	1317	1458	2474A	B
2474	1414	1458	2474A	B		143204	W045.5	2475	1503	1640	2475A	B
2475	1601	1640	2475A	B		161920	W072.3	2476	1646	1824	2476A	B
2475	1645	1650	2476A	B				2477	1830	2010	2477A	B
2476	1748	1824	2476A	B		180637	W099.1	2478	2016	2159	2478A	B
2476	1830	1837	2477A	B				2479	2200	2359	2482R	A
2477	1935	2010	2477A	B		195353	W125.9					
2477	2016	2024	2478A	B								
2478	2123	2158	2478A	B		214110	W152.7					
2478	2200	2212	2482R	A								
2479	2310	2358	2482R	A		232827	W179.6					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2466	0047	0143	2468R	A		010724	W024.3		0047	0240	2468R	A
2467	0231	0239	2468R	A		025440	W051.1		0241	0426	2468R	B
2467	0241	0330	2468R	B					0431	0611	2469R	B
2468	0419	0425	2468R	B		044157	W077.9		0617	0754	2470A	B
2468	0431	0517	2469R	B					0759	0941	2471A	B
2469*	0606	0611	2469R	B		062913	W104.8		0946	1126	2472A	B
2469	0617	0704	2470A	B					1131	1312	2473A	B
2470	0759	0852	2471A	B		081630	W131.6		1317	1459	2474A	B
2471	0946	1039	2472A	B		100346	W158.4		1503	1641	2475A	B
2472	1131	1226	2473A	B		115103	E174.8		1645	1825	2476A	B
2473	1318	1414	2474A	B		133819	E148.0		1830	2011	2477A	B
2474	1503	1601	2475A	B		152536	E121.2		2016	2159	2478A	B
2475	1650	1748	2476A	B		171253	E094.3		2159	2359	2482R	A
2476	1837	1935	2477A	B		190009	E067.5					
2477	2024	2123	2478A	B		204726	E040.7					
2478	2212	2310	2482R	A		223442	E013.9					
2479						002159	W012.9					

*NO 6.7 DATA

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
14 JUNE 1973

THIR							ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE				INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALD	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
DAYTIME THIR						**ASC. NODE**						
2480						011543	E153.6	2481	0148	0343	2481R	B
2481	0244	0333	2481R	B		030300	E126.8	2482	0349	0526	2482R	B
2482	0432	0521	2482R	B		045016	E100.0	2483	0529	0717	2484A	B
2483	0619	0708	2484A	B		063733	E073.2	2484	0716	0858	2484A	A
2484	0806	0855	2484A	A		082449	E046.3	2485	0859	1042	2485A	B
2485	0954	1041	2485A	B		101206	E019.5	2486	1047	1229	2486A	B
2486	1141	1228	2486A	B		115922	W007.3	2487	1234	1413	2487A	B
2487	1328	1412	2487A	B		134639	W034.1	2488	1418	1557	2488A	B
2488	1515	1556	2488A	B		153355	W060.9	2489	1602	1742	2489A	B
2489	1703	1742	2489A	B		172112	W087.8	2490	1748	1925	2490A	B
2490*	1850	1924	2490A	B		190828	W114.6	2491	1930	2111	2491A	B
2491	2037	2110	2491A	B		205545	W141.4	2492	2116	2259	2492A	B
2491	2116	2126	2492A	B								
2492	2225	2259	2492A	B		224301	W168.2					
*ADDITIONAL 6.7 CHANNEL DATA												
2490	1930	1939	2491A	B								
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2480	0148	0244	2481R	B		020915	W039.8	0149	0343	2481R	B	
2481	0333	0343	2481R	B		035632	W066.6	0349	0526	2482R	B	
2481	0349	0432	2482R	B				0531	0718	2484A	B	
2482	0531	0619	2484A	B		054348	W093.4	0715	0858	2484A	A	
2483	0708	0717	2484A	B		073105	W120.2	0859	1042	2485A	B	
2483	0715	0806	2484A	A				1047	1229	2486A	B	
2484	0859	0954	2485A	B		091821	W147.0	1234	1413	2487A	B	
2485	1047	1141	2486A	B		110538	W173.9	1418	1557	2488A	B	
2486	1234	1328	2487A	B		125254	E159.3	1602	1743	2489A	B	
2487	1418	1515	2488A	B		144011	E132.5	1748	1925	2490A	B	
2488	1604	1703	2489A	B		162727	E105.7	1930	2111	2491A	B	
2489	1752	1850	2490A	B		181444	E078.9	2116	2300	2492A	B	
2490	1939	2037	2491A	B		200200	E052.0					
2491	2126	2225	2492A	B		214917	E025.2					
2492						233633	W001.6					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
15 JUNE 1973

THIR							ESMR				
	11.5 + 6.7		INT ORBIT +	H D R	THIR GRID CORR	ASC. AND DESC. NODE				INT ORBIT +	H D R
DATA ORBIT	ON HRMN	OFF HRMN	STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	STDN	S
	DAYTIME THIR					ASC. NODE						
2493						003018	E165.0	2496	0443	0633	2497A	B
2494						021735	E138.2	2497	0629	0813	2497A	A
2495						040451	E111.4	2498	0814	0957	2498A	B
2496	0534	0622	2497A	B		055208	E084.5	2499	1002	1142	2499A	B
2497	0721	0810	2497A	A		073924	E057.7	2500	1148	1329	2500A	B
2498	0908	0957	2498A	B		092641	E030.9	2501	1334	1513	2501A	B
2499	1055	1143	2499A	B		111357	E004.1	2502	1518	1656	2502A	B
2500	1243	1329	2500A	B		130114	W022.7	2503	1701	1840	2503A	B
2501	1430	1513	2501A	B		144830	W049.6	2504	1845	2025	2504A	B
2502	1617	1656	2502A	B		163547	W076.4	2505	2031	2206	2505A	B
2503	1805	1839	2503A	B		182303	W103.2	2506	2217	0015	2509R	A
2503	1844	1853	2504A	B								
2504	1952	2025	2504A	B		201020	W130.0					
2504	2031	2041	2505A	B								
2505	2139	2215	2505A	B		215736	W156.8					
2505	2217	2228	2509R	A								
2506	2326	0015	2509R	A		234453	E176.3					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2493						012350	W028.4		0443	0634	2497A	B
2494						031107	W055.2		0629	0814	2497A	A
2495	0443	0534	2497A	B		045823	W082.1		0814	0958	2498A	B
2496	0622	0633	2497A	B		064540	W108.9		1002	1142	2499A	B
2496	0629	0721	2497A	A					1148	1330	2500A	B
2497	0814	0908	2498A	B		083256	W135.7		1334	1514	2501A	B
2498	1002	1055	2499A	B		102013	W162.5		1518	1657	2502A	B
2499	1148	1243	2500A	B		120729	E170.7		1701	1840	2503A	B
2500	1334	1430	2501A	B		135446	E143.9		1845	2026	2504A	B
2501	1519	1617	2502A	B		154202	E117.1		2031	2215	2505A	B
2502	1706	1805	2503A	B		172919	E090.2		2217	0015	2509R	A
2503	1853	1952	2504A	B		191635	E063.4					
2504	2041	2139	2505A	B		210352	E036.6					
2505	2228	2326	2509R	A		225108	E009.8					
2506						003825	W017.0					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
16 JUNE 1973

THIR							ASC. AND		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO		DESC. TIME HRMNSS	NODE LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR							**ASC. NODE**						
2507							013209	E149.5	2508	0208	0401	2508R	B
2508	0301	0350	2508R	B			031926	E122.7	2509	0407	0542	2509R	B
2509	0448	0537	2509R	B			050643	E095.9	2510	0548	0723	2510A	B
2510	0635	0724	2510A	B			065359	E069.1	2511	0831	0911	2511A	B
2511	0823	0911	2511A	B			084116	E042.2	2512	0916	1057	2512A	B
2512	1010	1057	2512A	B			102832	E015.4	2513	1103	1240	2513A	B
2513	1157	1244	2513A	B			121549	W011.4	2514	1249	1427	2514A	B
2514	1345	1427	2514A	B			140305	W038.2	2515	1533	1613	2515A	B
2515	1532	1612	2515A	B			155022	W065.0	2516	1618	1756	2516A	B
2516	1719	1756	2516A	B			173738	W091.9	2517	1801	1940	2517A	B
2516	1801	1808	2517A	B					2518	2045	2122	2518A	B
2517	1906	1940	2517A	B			192455	W118.7	2519	2132	2316	2519A	B
2517	1945	1955	2518A	B									
2518	2054	2127	2518A	B			211211	W145.5					
2518	2132	2143	2519A	B									
2519	2241	2315	2519A	B			225928	W172.3					
NIGHTTIME THIR							**DESC. NODE**		**NEMS - SCR - ITPR**				
2507	0208	0301	2508R	B			022541	W043.9	0209	0401	2508R	B	
2508	0350	0401	2508R	B			041258	W070.7	0406	0542	2509R	B	
2508	0407	0448	2509R	B					0548	0726	2510A	B	
2509	0548	0635	2510A	B			060014	W097.5	0730	0911	2511A	B	
2510	0730	0823	2511A	B			074731	W124.3	0916	1057	2512A	B	
2511	0917	1010	2512A	B			093447	W151.1	1103	1244	2513A	B	
2512	1103	1157	2513A	B			112204	W178.0	1249	1428	2514A	B	
2513	1249	1345	2514A	B			130921	E155.2	1433	1613	2515A	B	
2514	1433	1532	2515A	B			145637	E128.4	1618	1756	2516A	B	
2515	1621	1719	2516A	B			164354	E101.6	1801	1941	2517A	B	
2516	1808	1906	2517A	B			183110	E074.8	1945	2123	2518A	B	
2517	1955	2054	2518A	B			201827	E047.9	2132	3216	2519A	B	
2518	2143	2241	2519A	B			220543	E021.1					
2519							235300	W005.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
17 JUNE 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2520						004644	E160.9	2521	0117	0310	2522R	A
2521	0216	0304	2522R	A		023401	E134.1	2522	0310	0457	2522R	B
2522	0403	0452	2522R	B		042118	E107.2	2523	0503	0645	2523R	B
2523	0550	0639	2523R	B		060834	E080.4	2524	0650	0727	2524R	B
2524	0737	0826	2524A	B		075551	E053.6	2525	0832	1013	2525R	B
2525	0925	1013	2525A	B		094307	E026.8	2526	1018	1158	2526R	B
2526	1112	1158	2526A	B		113024	000.0	2527	1203	1345	2527R	B
2527	1259	1345	2527A	B		131740	W026.9	2528	1351	1528	2528R	B
2528	1446	1528	2528A	B		150457	W053.7	2529	1533	1713	2529R	B
2529	1634	1713	2529A	B		165213	W080.5	2530	1719	1856	2530R	B
2530	1821	1855	2530A	B		183930	W107.3	2531	1901	2043	2531R	B
2530	1901	1910	2531A	B				2532	2049	2232	2532A	B
2531	2008	2043	2531A	B		202646	W134.1					
2531	2049	2057	2532A	B								
2532	2156	2232	2532A	B		221403	W160.9					
2532	2233	2244	2536R	A								
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2520	0118	0216	2522R	A		014016	W032.5		0118	0310	2522R	A
2521	0304	0309	2522R	A		032733	W059.3		0310	0458	2522R	B
2521	0310	0403	2522R	B					0503	0645	2523R	B
2522	0503	0550	2523R	B		051449	W086.2		0650	0828	2524A	B
2523	0639	0645	2523R	B		070206	W113.0		0832	1014	2525A	B
2523	0650	0737	2524A	B					1018	1158	2526A	B
2524	0832	0925	2525A	B		084922	W139.8		1203	1346	2527A	B
2525	1018	1112	2526A	B		103639	W166.6		1351	1529	2528A	B
2526	1203	1259	2527A	B		122355	E166.6		1533	1714	2529A	B
2527	1351	1446	2528A	B		141112	E139.8		1719	1856	2530A	B
2528	1535	1634	2529A	B		155828	E113.0		1901	2044	2531A	B
2529	1723	1821	2530A	B		174545	E086.2		2049	2232	2532A	B
2530	1910	2008	2531A	B		193301	E059.3		2233	0031	2536R	A
2531	2057	2156	2532A	B		212018	E032.5					
2532	2244	2343	2536R	A		230735	E005.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
18 JUNE 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE					INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
2533	2343	0031	2536R	A		000119	E172.2	2533	2233	0031	2536R	A
2534						014836	E145.4	2535	0228	0414	2535R	B
2535	0317	0406	2535R	B		033552	E118.6	2536	0419	0559	2536R	B
2536	0505	0554	2536R	B	1N	052309	E091.8	2537	0604	0741	2537A	B
2537	0652	0741	2537A	B		071026	E065.0	2538	0747	0920	2538A	B
2538	0839	0927	2538A	B		085742	E038.1	2539	0933	1115	2539A	B
2539	1026	1113	2539A	B		104459	E011.3	2540	1119	1301	2540A	B
2540	1214	1300	2540A	B		123215	W015.5	2541	1306	1447	2541A	B
2541	1401	1446	2541A	B		141932	W042.3	2542	1452	1629	2542A	B
2542	1548	1628	2542A	B		160648	W069.1	2543	1634	1812	2543A	B
2543	1736	1811	2543A	B		175405	W096.0	2544	1817	1957	2544A	B
2543	1817	1824	2544A	B				2545	2003	2143	2545A	B
2544	1923	1957	2544A	B		194121	W122.8					
2544	2002	2012	2545A	B								
2545	2110	2143	2545A	B		212838	W149.6					
2546						231554	W176.4					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2533						005451	W021.1		0229	0414	2535R	B
2534	0229	0317	2535R	B		024208	W048.0		0419	0559	2536R	B
2535	0406	0413	2535R	B		042924	W074.8		0604	0742	2537A	B
2535	0419	0505	2536R	B	1S				0746	0920	2538A	B
2536	0604	0652	2537A	B		061641	W101.6		0933	1114	2539A	B
2537	0746	0839	2538A	B		080357	W128.4		1119	1301	2540A	B
2538	0933	1026	2539A	B		095114	W155.2		1306	1445	2541A	B
2539	1119	1214	2540A	B		113830	E177.9		1451	1629	2542A	B
2540	1306	1401	2541A	B		132547	E151.1		1634	1812	2543A	B
2541	1451	1548	2542A	B		151303	E124.3		1817	1958	2544A	B
2542	1637	1736	2543A	B		170020	E097.5		2002	2143	2545A	B
2543	1824	1923	2544A	B		184736	E070.7					
2544	2012	2110	2545A	B		203453	E043.8					
2545						222209	E017.0					
2546						000926	W009.8					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
19 JUNE 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2547						010311	E156.8	2550	0521	0710	2550R	B
2548						025027	E129.9	2551	0708	0841	2551A	B
2549						043744	E103.1	2552	0847	1029	2552A	B
2550	0607	0655	2551A	A		062500	E076.3	2553	1034	1215	2553A	B
2551	0754	0841	2551A	B		081217	E049.5	2554	1220	1402	2554A	B
2552	0941	1028	2552A	B		095934	E022.7	2555	1407	1544	2555A	B
2553	1128	1215	2553A	B		114650	W004.2	2556	1549	1727	2556A	B
2554	1316	1402	2554A	B		133407	W031.0	2557	1733	1913	2557A	B
2555	1503	1544	2555A	B	1N	152123	W057.8	2558	1918	2057	2558A	B
2556	1650	1728	2556A	B	1N	170840	W084.6	2559	2103	2249	2559A	B
2556	1733	1739	2557A	B	1N							
2557	1837	1913	2557A	B	1N	185556	W111.4					
2557	1918	1926	2558A	B	1N							
2558	2025	2057	2558A	B	1N	204313	W138.3					
2558	2103	2114	2559A	B	1N							
2559	2212	2249	2559A	B	1N	223029	W165.1					
2559	2250	2301	2562R	A	1N							
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2547						015642	W036.6		0521	0709	2551A	A
2548						034359	W063.4		0708	0842	2551A	B
2549	0520	0607	2551A	A		053115	W090.3		0846	1029	2552A	B
2550	0655	0708	2551A	A		071832	W117.1		1034	1215	2553A	B
2550	0708	0754	2551A	B					1220	1403	2554A	B
2551	0846	0941	2552A	B		090548	W143.9		1407	1545	2555A	B
2552	1034	1128	2553A	B		105305	W170.7		1549	1728	2556A	B
2553	1221	1316	2554A	B		124022	E162.5		1733	1913	2557A	B
2554	1408	1503	2555A	B	1S	142738	E135.6		1918	2058	2558A	B
2555	1552	1650	2556A	B	1S	161455	E108.8		2103	2250	2559A	B
2556	1739	1837	2557A	B	1S	180211	E082.0		2250	0048	2562R	A
2557	1926	2025	2558A	B	1S	194928	E055.2					
2558	2114	2212	2559A	B	1S	213644	E028.4					
2559	2301	2359	2562R	A	1S	232401	E001.6					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
20 JUNE 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2560	2359	0048	2562R	A	1N	001746	E168.1	2560	2250	0048	2562R	A
2561						020502	E141.3	2562	0344	0430	2562R	B
2562	0334	0423	2562R	B	1N	035219	E114.5	2563	0436	0620	2563R	B
2563	0521	0610	2563R	B	1N	053935	E087.7	2564	0627	0757	2564A	B
2564	0708	0757	2564A	B		072652	E060.9	2565	0802	0943	2565A	B
2565	0856	0944	2565A	B	1N	091408	E034.0	2566	0949	1130	2566A	B
2566	1043	1130	2566A	B		110125	E007.2	2567	1136	1315	2567A	B
2567	1230	1315	2567A	B	1W	124842	E019.6	2568	1321	1501	2568A	B
2568	1417	1501	2568A	B	1N	143558	W046.4	2569	1506	1645	2569A	B
2569	1605	1644	2569A	B		162315	W073.2	2570	1650	1829	2570A	B
2570	1752	1830	2570A	B	1N	181031	W100.1	2571	1835	2018	2571A	B
2570	1835	1841	2571A	B	1N			2572	2024	2158	2572A	B
2571	1939	2018	2571A	B	1N	195748	W126.9					
2572	2127	2158	2572A	B	1N	214504	W153.7					
2573						233221	E179.5					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2560						011117	W025.3	0245	0430	2562R	B	
2561	0245	0334	2562R	B	1S	025834	W052.1	0435	0620	2563R	B	
2562	0423	0430	2562R	B	1S	044550	W078.9	0627	0758	2564A	B	
2562	0436	0521	2563R	B	1S			0802	0944	2565A	B	
2563	0610	0620	2563R	B	1S	063307	W105.7	0949	1131	2566A	B	
2563	0627	0708	2564A	B				1136	1316	2567A	B	
2564	0802	0856	2565A	B	1S	082023	W132.5	1321	1502	2568A	B	
2565	0949	1043	2566A	B		100740	W159.3	1506	1645	2569A	B	
2566	1136	1230	2567A	B	1E	115456	E173.8	1650	1830	2570A	B	
2567	1321	1417	2568A	B	1S	134213	E147.0	1835	2018	2571A	B	
2568	1506	1605	2569A	B		152929	E120.2	2024	2159	2572A	B	
2569	1654	1752	2570A	B	1S	171646	E093.4					
2570	1841	1939	2571A	B	1S	190402	E066.6					
2571	2028	2127	2572A	B	1S	205119	E039.7					
2572						223836	E012.9					
2573	0005	0101	2576R	A	1S	002552	W013.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
21 JUNE 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE					INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
	DAYTIME THIR					ASC. NODE						
2574	0101	0150	2576R	A	1N	011937	E152.7	2574	0005	0200	2576R	A
2575	0248	0337	2575R	B	1N	030654	E125.8	2575	0156	0348	2575R	B
2576	0436	0520	2576R	B	1N	045410	E099.0	2576	0353	0520	2576R	B
2577*						064127	E072.2	2577	0535	0721	2577R	B
2578	0810	0858	2578A	B	1N	082843	E045.4	2578	0727	0858	2578A	B
2579	0957	1046	2579A	B	1N	101600	E018.6	2579	0903	1046	2579A	B
2580	1145	1232	2580A	B	1N	120316	W008.3	2580	1051	1232	2580A	B
2581	1332	1417	2581A	B	1N	135033	W035.1	2581	1237	1416	2581A	B
2582	1519	1604	2582A	B	1N	153750	W061.9	2582	1422	1603	2582A	B
2583	1707	1742	2583A	B	1N	172506	W088.7	2583	1609	1742	2583A	B
2583	1748	1755	2584A	B	1N			2584	1748	1926	2584A	B
2584	1854	1928	2584A	B	1N	191223	W115.6	2585	1934	2119	2585A	B
2584	1934	1943	2585A	B				2586	2124	2305	2586A	B
2585	2041	2119	2585A	B		205939	W142.4					
2585	2125	2130	2586A	B								
2586	2228	2305	2586A	B		224656	W169.2					
2586	2306	2317	2590R	A	1N							
*6.7 DATA ONLY												
2577	0623	0712	2577A	B								
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2574	0150	0200	2576R	A	1S	021309	W040.7	0005	0200	2576R	A	
2574	0156	0248	2575R	B	1S			0155	0348	2575R	B	
2575	0337	0348	2575R	B	1S	040025	W067.5	0353	0521	2576R	B	
2575	0354	0436	2576R	B	1S			0535	0721	2577R	B	
2576*						054742	W094.4	0726	0858	2578A	B	
2577*	0727	0810	2578A	B	1S	073458	W121.2	0903	1046	2579A	B	
2578	0904	0957	2579A	B	1S	092215	W148.0	1051	1232	2580A	B	
2579	1052	1145	2580A	B	1S	110931	W174.8	1237	1417	2581A	B	
2580	1237	1332	2581A	B	1S	125648	E158.4	1422	1604	2582A	B	
2581	1422	1519	2582A	B	1S	144404	E131.5	1609	1742	2583A	B	
2582	1609	1707	2583A	B	1S	163121	E104.7	1747	1932	2584A	B	
2583	1755	1854	2584A	B	1S	181837	E077.9	1934	2119	2585A	B	
2584	1943	2041	2585A	B		200554	E051.1	2124	2305	2586A	B	
2585	2130	2228	2586A	B		215310	E024.3					
2586	2317	0016	2590R	A	1S	234027	W002.6					
*6.7 DATA ONLY												
2576	0535	0623	2577A	B								
2577	0712	0721	2577A	B								

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
22 JUNE 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE					INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
2587	0016	0105	2590R	A	1N	003412	E164.0	2587	2306	0105	2590R	A
2588						022129	E137.2	2589	0259	0502	2589R	B
2589	0350	0439	2590R	B	1N	040845	E110.4	2591	0638	0814	2591A	B
2590						055602	E083.6	2592	0819	1002	2592A	B
2591	0725	0814	2591A	B	1N	074318	E056.8	2593	1007	1146	2593A	B
2592	0912	1001	2592A	B	1N	093035	E029.9	2594	1151	1333	2594A	B
2593	1059	1146	2593A	B	1N	111751	E003.1	2595	1337	1516	2595A	B
2594	1247	1332	2594A	B		130508	W023.7	2596	1523	1702	2596A	B
2595	1434	1516	2595A	B		145224	W050.5	2597	1707	1843	2597A	B
2596	1621	1702	2596A	B	1N	163941	W077.3	2598	1849	2031	2598A	B
2597	1808	1844	2597A	B	1N	182658	W104.2	2599	2038	2215	2599A	B
2597	1849	1857	2598A	B								
2598	1956	2032	2598A	B		201414	W131.0					
2598	2037	2045	2599A	B								
2599	2143	2216	2599A	B		220131	W157.8					
2600						234847	E175.4					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2587						012743	W029.4	2306	0106	2590R	B	
2588	0300	0350	2590R	B	1S	031500	W056.2	0259	0502	2590R	B	
2589	0439	0501	2590R	B	1S	050216	W083.0	0638	0815	2591A	B	
2590	0638	0725	2591A	B	1S	064933	W109.8	0819	1002	2592A	B	
2591	0820	0912	2592A	B	1S	083650	W136.7	1006	1146	2593A	B	
2592	1007	1059	2593A	B	1S	102406	W163.5	1151	1333	2594A	B	
2593	1151	1247	2594A	B		121123	E169.7	1338	1517	2595A	B	
2594	1338	1434	2595A	B		135839	E142.9	1522	1702	2596A	B	
2595	1523	1621	2596A	B	1S	154556	E116.1	1707	1844	2597A	B	
2596	1710	1808	2597A	B	1S	173312	E089.3	1849	2032	2598A	B	
2597	1857	1956	2598A	B		192029	E062.5	2037	2216	2599A	B	
2598	2045	2143	2599A	B		210745	E035.6					
2599						225502	E008.8					
2600	0021	0118	2603R	A	1S	004218	W018.0					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
23 JUNE 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE					INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
DAYTIME THIR						**ASC. NODE**						
2601	0118	0206	2603R	A	1N	013604	E148.6	2601	0021	0216	2603R	A
2602	0305	0354	2602R	B	1N	032320	E121.7	2602	0212	0405	2602R	B
2603	0452	0541	2603R	B	1N	051037	E094.9	2603	0411	0546	2603R	B
2604	0639	0728	2604A	B	1N	065753	E068.1	2604	0557	0730	2604A	B
2605	0827	0916	2605A	B	1N	084510	E041.3	2605	0736	0916	2605A	B
2606	1014	1103	2606A	B	1N	103226	E014.4	2606	0922	1102	2606A	B
2607	1201	1250	2607A	B	1N	121943	W012.4	2607	1109	1250	2607A	B
2608	1348	1433	2608A	B	1N	140659	W039.2	2608	1256	1433	2608A	B
2609	1536	1617	2609A	B	2N	155416	W066.0	2609	1439	1617	2609A	B
2610	1723	1758	2610A	B	1N	174132	W092.8	2610	1622	1757	2610A	B
2610	1803	1812	2611A	B	1N			2611	1804	1942	2611A	B
2611	1910	1943	2611A	B	1N	192849	W119.7	2612	1949	2132	2612A	B
2611	1948	1959	2612A	B	1N			2613	2149	2322	2613A	B
2612	2058	2132	2612A	B	1N	211605	W146.5					
2613	2245	2321	2613A	B		230322	W173.3					
2613	2324	2334	2616R	A								
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2601	0206	0216	2603R	A	1S	022935	W044.8	0021	0217	2603R	A	
2601	0212	0305	2602R	B	1S			0211	0405	2602R	B	
2602	0354	0405	2602R	B	1S	041651	W071.6	0410	0547	2603R	B	
2602	0411	0452	2603R	B	1S			0552	0730	2604A	B	
2603	0541	0547	2603R	B	1S	060408	W098.5	0735	0917	2605A	B	
2603	0553	0639	2604A	B	1S			0922	1103	2606A	B	
2604	0735	0827	2605A	B	1S	075124	W125.3	1108	1251	2607A	B	
2605	0922	1014	2606A	B	1S	093841	W152.1	1256	1434	2608A	B	
2606	1109	1201	2607A	B	1S	112557	W178.9	1438	1617	2609A	B	
2607	1256	1348	2608A	B	1S	131314	E154.3	1622	1758	2610A	B	
2608	1439	1536	2609A	B	2S	150030	E127.4	1803	1943	2611A	B	
2609	1625	1723	2610A	B	1S	164747	E100.6	1948	2132	2612A	B	
2610	1812	1910	2611A	B	1S	183503	E073.8	2149	2323	2613A	B	
2611	1959	2058	2612A	B	1S	202220	E047.0	2323	0121	2616R	A	
2612	2149	2245	2613A	B		220937	E020.2					
2613	2334	0032	2616R	A		235653	W006.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
24 JUNE 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2614	0032	0121	2616R	A		005039	E159.9	2614	2324	0120	2616R	A
2615						023755	E133.1	2616	0315	0502	2616R	B
2616	0407	0456	2616R	B	1N	042512	E106.3	2617	0508	0649	2617R	B
2617	0554	0643	2617R	B	1N	061228	E079.5	2618	0655	0829	2618A	B
2618	0741	0830	2618A	B	1N	075945	E052.6	2619	0834	1017	2619A	B
2619	0928	1017	2619A	B	1N	094701	E025.8	2620	1023	1201	2620A	B
2620	1116	1201	2620A	B	1N	113418	W001.0	2621	1207	1347	2621A	B
2621	1303	1347	2621A	B		132134	W027.8	2622	1353	1532	2622A	B
2622	1450	1531	2622A	B		150851	W054.7	2623	1538	1717	2623A	B
2623	1638	1717	2623A	B	1N	165607	W081.5	2624	1723	1901	2624A	B
2624	1825	1901	2624A	B	1N	184324	W108.3	2625	1907	2048	2625A	B
2624	1907	1914	2625A	B	1N			2626	2055	2232	2626A	B
2625	2012	2048	2625A	B	1N	203040	W135.1					
2625	2055	2101	2626A	B	1N							
2626	2159	2232	2626A	B	1N	221757	W161.9					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2614						014410	W033.5	0314	0502	2616R	B	
2615	0315	0407	2616R	B	1S	033126	W060.3	0507	0650	2617R	B	
2616	0456	0502	2616R	B	1S	051843	W087.1	0654	0830	2618A	B	
2616	0508	0554	2617R	B	1S			0835	1018	2619A	B	
2617	0643	0649	2617R	B	1S	070559	W113.9	1023	1202	2620A	B	
2617	0655	0741	2618A	B	1S			1207	1348	2621A	B	
2618	0835	0928	2619A	B	1S	085316	W140.8	1353	1532	2622A	B	
2619	1024	1116	2620A	B	1S	104032	W167.6	1537	1718	2623A	B	
2620	1207	1303	2621A	B		122749	E165.6	1722	1902	2624A	B	
2621	1353	1450	2622A	B		141505	E138.8	1907	2049	2625A	B	
2622	1539	1638	2623A	B	1S	160222	E112.0	2055	2233	2626A	B	
2623	1726	1825	2624A	B	1S	174938	E085.1					
2624	1914	2012	2625A	B	1S	193655	E058.3					
2625	2101	2159	2626A	B	1S	212411	E031.5					
2626						231128	E004.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
25 JUNE 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2627						000513	E171.3	2628	0037	0232	2629R	A
2628	0134	0223	2629R	A		015230	E144.5	2629	0233	0417	2629R	B
2629	0321	0410	2629R	B		033947	E117.6	2630	0423	0603	2630R	B
2630	0509	0557	2630R	B		052703	E090.8	2631	0610	0745	2631A	B
2631	0656	0745	2631A	B	1N	071420	E064.0	2632	0751	0931	2632A	B
2632	0843	0931	2632A	B	1N	090136	E037.2	2633	0937	1118	2633A	B
2633	1030	1118	2633A	B	1N	104853	E010.3	2634	1124	1303	2634A	B
2634	1218	1303	2634A	B	1N	123609	W016.5	2635	1310	1448	2635A	B
2635	1405	1449	2635A	B		142326	W043.3	2636	1454	1633	2636A	B
2636	1552	1633	2636A	B	1N	161042	W070.1	2637	1639	1816	2637A	B
2637	1739	1817	2637A	B	1N	175759	W096.9	2638	1822	2003	2638A	B
2637	1822	1828	2638A	B	1N			2639	2009	2152	2639A	B
2638	1927	2003	2638A	B	1N	194515	W123.8	2640	2154	2350	2640R	A
2638	2008	2016	2639A	B								
2639	2114	2153	2639A	B		213232	W150.6					
2639	2154	2203	2643R	A	1N							
2640	2301	2349	2643R	A	1N	231948	W177.4					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2627	0037	0134	2629R	A		005844	W022.1	0037	0232	2629R	A	
2628	0223	0232	2629R	A		024601	W049.0	0233	0417	2629R	B	
2628	0233	0321	2629R	B				0422	0604	2630R	B	
2629	0410	0417	2629R	B		043317	W075.8	0609	0746	2631A	B	
2629	0423	0509	2630R	B				0750	0931	2632A	B	
2630	0557	0604	2630R	B		062034	W102.6	0936	1119	2633A	B	
2630	0609	0656	2631A	B	1S			1124	1304	2634A	B	
2631	0751	0843	2632A	B	1S	080751	W129.4	1309	1449	2635A	B	
2632	0937	1030	2633A	B	1S	095507	W156.2	1454	1633	2636A	B	
2633	1124	1218	2634A	B	1S	114224	E177.0	1638	1817	2637A	B	
2634	1309	1405	2635A	B		132940	E150.2	1822	2003	2638A	B	
2635	1454	1552	2636A	B	1S	151657	E123.3	2008	2153	2639A	B	
2636	1641	1739	2637A	B	1S	170413	E096.5	2154	2350	2643R	A	
2637	1828	1927	2638A	B	1S	185130	E069.7					
2638	2016	2114	2639A	B		203846	E042.9					
2639	2203	2301	2643R	A	1S	222603	E016.1					
2640						001319	W010.8					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
26 JUNE 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE HRMNSS	LONG DEG	DATA ORBIT	HRMN	HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2641						010705	E155.8	2643	0328	0516	2643R	B
2642						025421	E129.0	2644	0522	0705	2644R	B
2643	0423	0512	2643R	B	1N	044138	E102.1	2645	0712	0846	2645A	B
2644	0610	0659	2644R	B		062854	E075.3	2646	0858	1036	2646A	B
2645	0758	0846	2645A	B	1N	081611	E048.5	2647	1043	1219	2647A	B
2646	0945	1034	2646A	B	1N	100328	E021.7	2648	1225	1405	2648A	B
2647	1132	1219	2647A	B		115044	W005.1	2649	1412	1550	2649A	B
2648	1319	1406	2648A	B	1N	133801	W032.0	2650	1556	1730	2650A	B
2649	1507	1551	2649A	B	1N	152517	W058.8	2651	1737	1915	2651A	B
2650	1654	1731	2650A	B	1N	171234	W085.6	2652	1919	2059	2652A	B
2650	1736	1743	2651A	B	1N			2653	2107	2252	2653A	B
2651	1841	1915	2651A	B	1N	185950	W112.4					
2651	1921	1930	2652A	B	1N							
2652	2029	2100	2652A	B	1N	204707	W139.2					
2652	2105	2117	2653A	B								
2653	2216	2252	2653A	B		223423	W166.1					
2653	2254	2305	2656R	A								
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2641						020036	W037.6	0327	0517	2643R	B	
2642	0328	0423	2643R	B	1S	034752	W064.4	0523	0706	2644R	B	
2643	0523	0610	2644R	B		053509	W091.2	0711	0847	2645A	B	
2644	0659	0706	2644R	B		072225	W118.0	0851	1037	2646A	B	
2644	0712	0758	2645A	B	1S			1042	1220	2647A	B	
2645	0852	0945	2646A	B	1S	090942	W144.9	1225	1406	2648A	B	
2646	1043	1132	2647A	B		105658	W171.7	1411	1551	2649A	B	
2647	1225	1319	2648A	B	1S	124415	E161.5	1556	1731	2650A	B	
2648	1411	1507	2649A	B	1S	143131	E134.7	1736	1915	2651A	B	
2649	1556	1654	2650A	B	1S	161848	E107.9	1920	2059	2652A	B	
2650	1743	1841	2651A	B	1S	180604	E081.0	2105	2253	2653A	B	
2651	1930	2029	2652A	B	1S	195321	E054.2	2254	0056	2656R	A	
2652	2117	2216	2653A	B		214038	E027.4					
2653	2305	0003	2656R	A		232754	E000.6					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
27 JUNE 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2654	0003	0052	2656R	A		002140	E167.1	2654	2249	0055	2656R	A
2655						020856	E140.3	2656	0248	0432	2657R	B
2656	0338	0427	2656R	B		035613	E113.5	2657	0438	0619	2657R	B
2657	0525	0614	2657R	B		054329	E086.7	2658	0626	0802	2658A	B
2658	0712	0801	2658A	B		073046	E059.9	2659	0807	0945	2659A	B
2659	0859	0944	2659A	B		091802	E033.1	2660	0952	1138	2660A	B
2660	1047	1136	2660A	B		110519	E006.2	2661	1143	1321	2661A	B
2661	1234	1320	2661A	B		125235	W020.6	2662	1326	1508	2662A	B
2662	1421	1506	2662A	B		143952	W047.4	2663	1513	1648	2663A	B
2663	1609	1647	2663A	B		162709	W074.2	2664	1652	1834	2664A	B
2664	1756	1833	2664A	B		181425	W101.0	2665	1840	2017	2665A	B
2664	1839	1845	2665A	B				2666	2023	2206	2666A	B
2665	1943	2017	2665A	B		200142	W127.9	2667	2208	0005	2670R	A
2665	2023	2032	2666A	B								
2666	2130	2206	2666A	B		214858	W154.7					
2666	2208	2219	2670R	A								
2667	2318	0006	2670R	A		233615	E178.5					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2654						011511	W026.2	0247	0433	2656R	B	
2655	0248	0338	2656R	B		030227	W053.1	0438	0621	2657R	B	
2656	0427	0432	2656R	B		044944	W079.9	0626	0802	2658A	B	
2656	0438	0525	2657R	B				0807	0945	2659A	B	
2657	0614	0620	2657R	B		063700	W106.7	0950	1138	2660A	B	
2657	0626	0712	2658A	B				1143	1321	2661A	B	
2658	0807	0859	2659A	B		082417	W133.5	1326	1507	2662A	B	
2659	0950	1047	2660A	B		101133	W160.3	1512	1648	2663A	B	
2660	1143	1234	2661A	B		115850	E172.8	1652	1834	2664A	B	
2661	1326	1421	2662A	B		134606	E146.0	1839	2018	2665A	B	
2662	1512	1609	2663A	B		153323	E119.2	2023	2207	2666A	B	
2663	1657	1756	2664A	B		172039	E092.4	2207	0006	2670R	A	
2664	1845	1943	2665A	B		190756	E065.6					
2665	2032	2130	2666A	B		205512	E038.8					
2666	2219	2318	2670R	A		224229	E012.0					
2667						002945	W014.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
28 JUNE 1973

THIR							ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE				INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
	DAYTIME THIR					ASC. NODE						
2668						012331	E151.7	2669	0155	0350	2669R	B
2669	0252	0341	2669R	B		031048	E124.9	2670	0458	0535	2670R	B
2670	0439	0528	2670R	B		045804	E098.0	2671	0541	0722	2671R	B
2671	0627	0716	2671R	B		064521	E071.2	2672	0728	0903	2672A	B
2672	0814	0903	2672A	B		083237	E044.4	2673	0909	1052	2673A	B
2673	1001	1050	2673A	B		101954	E017.6	2674	1058	1239	2674A	B
2674	1149	1237	2674A	B		120710	W009.2	2675	1245	1425	2675A	B
2675	1336	1424	2675A	B		135427	W036.1	2676	1429	1605	2676A	B
2676	1523	1604	2676A	B		154143	W062.9	2677	1611	1748	2677A	B
2677	1710	1748	2677A	B		172900	W089.7	2678	1754	1932	2678A	B
2677	1754	1759	2678A	B	1N			2679	1937	2118	2679A	B
2678	1858	1931	2678A	B	1N	191617	W116.5	2680	2123	2309	2680A	B
2678	1937	1947	2679A	B								
2679	2045	2118	2679A	B		210333	W143.3					
2679	2123	2134	2680A	B								
2680	2232	2308	2680A	B		225050	W170.2					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2668	0154	0252	2669R	B		021702	W041.7		0154	0351	2669R	B
2669	0341	0351	2669R	B		040418	W068.5		0355	0537	2670R	B
2669	0358	0439	2670R	B					0541	0723	2671R	B
2670	0528	0535	2670R	B		055135	W095.3		0728	0904	2672A	B
2670	0541	0627	2671R	B					0909	1053	2673A	B
2671	0716	0722	2671R	B		073852	W122.2		1058	1240	2674A	B
2671	0728	0814	2672A	B					1245	1425	2675A	B
2672	0909	1001	2673A	B		092608	W149.0		1429	1605	2676A	B
2673	1058	1149	2674A	B		111325	W175.8		1617	1749	2677A	B
2674	1245	1336	2675A	B		130041	E157.4		1754	1932	2678A	B
2675	1430	1523	2676A	B		144758	E130.6		1937	2119	2679A	B
2676	1612	1710	2677A	B		163514	E103.8		2123	2309	2680A	B
2677	1759	1858	2678A	B	1S	182231	E076.9					
2678	1947	2045	2679A	B		200947	E050.1					
2679	2134	2232	2680A	B		215704	E023.3					
2680						234420	W003.5					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
29 JUNE 1973

THIR							ASC. AND		ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR		DESC. NODE	LONG				INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO		TIME HRMNSS	DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR						ASC. NODE						
2681							003806	E163.0	2682	0110	0301	2683R	A
2682	0207	0256	2683R	A			022523	E136.2	2683	0303	0449	2683R	B
2683	0354	0443	2683R	B			041239	E109.4	2684	0454	0635	2684R	B
2684	0541	0630	2684R	B			055956	E082.6	2685	0641	0817	2685A	B
2685	0729	0818	2685A	B			074712	E055.8	2686	0825	1008	2686A	B
2686	0916	1005	2686A	B			093429	E029.0	2687	1014	1154	2687A	B
2687	1103	1152	2687A	B			112145	E002.1	2688	1159	1338	2688A	B
2688	1250	1337	2688A	B			130902	W024.7	2689	1343	1522	2689A	B
2689	1438	1522	2689A	B			145618	W051.5	2690	1527	1700	2690A	B
2690	1625	1701	2690A	B			164335	W078.3	2691	1708	1846	2691A	B
2690	1706	1714	2691A	B					2692	1852	2032	2692A	B
2691	1812	1846	2691A	B			183051	W105.2	2693	2043	2223	2693A	B
2691	1852	1901	2692A	B					2694	2225	0011	2697R	A
2692	2000	2032	2692A	B			201808	W132.0					
2692	2043	2048	2693A	B									
2693	2147	2223	2693A	B			220524	W158.8					
2693	2225	2236	2697R	A									
2694	2334	0023	2697R	A			235241	E174.4					
	NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR				
2681	0110	0207	2683R	A			013137	W030.3	0110	0301	2683R	A	
2682*	0256	0301	2683R	A			031853	W057.2	0302	0448	2683R	B	
2682	0302	0354	2683R	B					0454	0635	2684R	B	
2683	0443	0449	2683R	B			050610	W084.0	0641	0818	2685A	B	
2683	0454	0541	2684R	B					0825	1008	2686A	B	
2684	0630	0635	2684R	B			065326	W110.8	1014	1155	2687A	B	
2684	0641	0729	2685A	B					1159	1338	2688A	B	
2685	0825	0916	2686A	B			084043	W137.6	1343	1522	2689A	B	
2686	1014	1103	2687A	B			102759	W164.4	1527	1701	2690A	B	
2687	1159	1250	2688A	B			121516	E168.7	1706	1847	2691A	B	
2688	1343	1438	2689A	B			140232	E141.9	1852	2033	2692A	B	
2689	1527	1625	2690A	B			154949	E115.1	2043	2224	2693A	B	
2690	1714	1812	2691A	B			173705	E088.3	2225	0021	2697R	A	
2691	1901	2000	2692A	B			192422	E061.5					
2692	2048	2147	2693A	B			211139	E034.6					
2693	2236	2334	2697R	A			225855	E007.8					
2694							004612	W019.0					

* NO 6.7 DATA

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
30 JUNE 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2695						013957	E147.6	2696	0221	0404	2696R	B
2696	0309	0358	2696R	B		032714	E120.8	2697	0411	0547	2697R	B
2697	0456	0545	2697R	B		051431	E093.9	2698	0556	0733	2698A	B
2698	0643	0732	2698A	B		070147	E067.1	2699	0739	0921	2699A	B
2699	0830	0919	2699A	B		084904	E040.3	2700	0927	1109	2700A	B
2700	1018	1107	2700A	B		103620	E013.5	2701	1120	1254	2701A	B
2701	1205	1254	2701A	B		122337	W013.3	2702	1300	1438	2702A	B
2702	1352	1438	2702A	B		141053	W040.2	2703	1443	1621	2703A	B
2703	1540	1620	2703A	B		155810	W067.0	2704	1626	1803	2704A	B
2704	1727	1802	2704A	B		174526	W093.8	2705	1808	1947	2705A	B
2704	1808	1816	2705A	B				2706	1953	2137	2706A	B
2705	1914	1947	2705A	B		193243	W120.6					
2705	1953	2003	2706A	B								
2706	2101	2137	2706A	B		211959	W147.4					
2707						230716	W174.3					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2695	0221	0309	2696R	B		023328	W045.8	0221	0404	2696R	B	
2696	0358	0405	2696R	B		042045	W072.6	0410	0548	2697R	B	
2696	0410	0456	2697R	B				0557	0734	2698A	B	
2697	0545	0551	2697R	B		060801	W099.5	0739	0921	2699A	B	
2697	0557	0643	2698A	B				0926	1110	2700A	B	
2698	0739	0830	2699A	B		075518	W126.3	1117	1254	2701A	B	
2699	0927	1018	2700A	B		094234	W153.1	1300	1439	2702A	B	
2700	1117	1205	2701A	B		112951	W179.9	1443	1621	2703A	B	
2701	1300	1352	2702A	B		131707	E153.3	1626	1803	2704A	B	
2702	1443	1540	2703A	B		150424	E126.5	1807	1958	2705A	B	
2703	1628	1727	2704A	B		165140	E099.7	1953	2138	2706A	B	
2704	1816	1914	2705A	B		183857	E072.8					
2705	2003	2101	2706A	B		202613	E046.0					
2706						221330	E019.2					
2707						000046	W007.6					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
1 JULY 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2708						005432	E158.9	2709	0126	0318	2710R	A
2709	0223	0312	2710R	A		024149	E132.1	2710	0317	0505	2710R	B
2710	0410	0459	2710R	B		042905	E105.3	2711	0510	0652	2711R	B
2711	0558	0647	2711R	B		061622	E078.5	2712	0657	0835	2712A	B
2712	0745	0834	2712A	B		080338	E051.6	2713	0840	1022	2713A	B
2713	0932	1021	2713A	B		095055	E024.8	2714	1028	1210	2714A	B
2714	1120	1208	2714A	B		113812	W002.0	2715	1215	1353	2715A	B
2715	1307	1353	2715A	B		132528	W028.8	2716	1359	1538	2716A	B
2716	1454	1537	2716A	B		151245	W055.6	2717	1543	1719	2717A	B
2717	1641	1719	2717A	B		170001	W082.5	2718	1724	1902	2718A	B
2717	1725	1730	2718A	B				2719	1908	2047	2719A	B
2718	1829	1901	2718A	B		184718	W109.3	2720	2054	2239	2720A	B
2718	1907	1918	2719A	B								
2719	2016	2047	2719A	B		203434	W136.1					
2719	2053	2105	2720A	B								
2720	2203	2239	2720A	B		222151	W162.9					
2720	2241	2252	2724R	A								
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2708	0126	0223	2710R	A		014803	W034.5		0126	0317	2710R	A
2709	0318	0410	2710R	B		035519	W061.3		0317	0505	2710R	B
2710	0459	0505	2710R	B		052236	W088.1		0510	0652	2711R	B
2710	0511	0558	2711R	B					0657	0835	2712A	B
2711	0657	0745	2712A	B		070952	W114.9		0839	1022	2713A	B
2712	0840	0932	2713A	B		085709	W141.7		1027	1211	2714A	B
2713	1028	1120	2714A	B		104426	W168.5		1215	1354	2715A	B
2714	1215	1307	2715A	B		123142	E164.6		1359	1538	2716A	B
2715	1359	1454	2716A	B		141859	E137.8		1543	1720	2717A	B
2716	1543	1641	2717A	B		160615	E111.0		1725	1902	2718A	B
2717	1730	1829	2718A	B		175332	E084.2		1907	2048	2719A	B
2718	1918	2016	2719A	B		194048	E057.4		2053	2239	2720A	B
2719	2105	2203	2720A	B		212805	E030.5		2241	0039	2724R	A
2720	2252	2350	2724R	A		231521	E003.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
2 JULY 1973

THIR						ASC. AND		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	DESC. TIME HRMNSS	NODE LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
		DAYTIME THIR				ASC. NODE						
2721	2350	0039	2724R	A		000907	E170.3	2721	2241	0037	2724R	A
2722						015624	E143.5	2723	0237	0421	2723R	B
2723	0325	0414	2723R	B		034340	E116.7	2724	0427	0607	2724R	B
2724	0512	0601	2724R	B		053057	E089.8	2725	0612	0750	2725A	B
2725	0700	0748	2725A	B		071813	E063.0	2726	0755	0940	2726A	B
2726	0847	0936	2726A	B		090530	E036.2	2727	0945	1126	2727A	B
2727	1034	1123	2727A	B		105246	E009.4	2728	1132	1309	2728A	B
2728	1221	1310	2728A	B		124003	W017.4	2729	1315	1453	2729A	B
2729	1409	1452	2729A	B		142719	W044.3	2730	1458	1637	2730A	B
2730	1556	1636	2730A	B		161436	W071.1	2731	1642	1819	2731A	B
2731	1743	1818	2731A	B		180152	W097.9	2732	1824	2004	2732A	B
2731	1824	1832	2732A	B				2733	2009	2152	2733A	B
2732	1930	2004	2732A	B		194909	W124.7					
2732	2009	2019	2733A	B								
2733	2118	2147	2733A	B		213626	W151.5					
2734						232342	W178.4					
		NIGHTTIME THIR				DESC. NODE			NEMS - SCR - ITPR			
2721						010238	W023.1		0237	0421	2723R	B
2722	0236	0325	2723R	B		024954	W049.9		0426	0607	2724R	B
2723	0414	0421	2723R	B		043711	W076.7		0613	0751	2725A	B
2723	0426	0512	2724R	B					0755	0940	2726A	B
2724	0613	0700	2725A	B		062427	W103.6		0945	1127	2727A	B
2725	0755	0847	2726A	B		081144	W130.4		1131	1310	2728A	B
2726	0945	1034	2727A	B		095900	W157.2		1315	1453	2729A	B
2727	1131	1221	2728A	B		114617	E176.0		1458	1637	2730A	B
2728	1315	1409	2729A	B		133333	E149.2		1642	1819	2731A	B
2729	1458	1556	2730A	B		152050	E122.4		1824	2005	2732A	B
2730	1645	1743	2731A	B		170806	E095.6		2009	2153	2733A	B
2731	1832	1930	2732A	B		185523	E068.7					
2732	2019	2118	2733A	B		204240	E041.9					
2733						222956	E015.1					
2734						001713	W011.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
3 JULY 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2735						011059	E154.8	2736	0142	0331	2737R	A
2736	0240	0328	2737R	A		025815	E128.0	2737	0332	0521	2737R	B
2737	0427	0516	2737R	B		044532	E101.2	2738	0526	0710	2738R	B
2738	0614	0703	2738R	B		063248	E074.4	2739	0716	0853	2739A	B
2739	0801	0850	2739A	B	1S	082005	E047.5	2740	0859	1041	2740A	B
2740	0949	1038	2740A	B		100721	E020.7	2741	1046	1224	2741A	B
2741	1136	1222	2741A	B		115438	W006.1	2742	1229	1408	2742A	B
2742	1323	1407	2742A	B		134154	W032.9	2743	1413	1552	2743A	B
2743	1510	1552	2743A	B		152911	W059.7	2744	1557	1733	2744A	B
2744	1658	1733	2744A	B		171627	W086.6	2745	1739	1918	2745A	B
2744	1739	1747	2745A	B				2746	1924	2105	2746A	B
2745	1845	1918	2745A	B		190344	W113.4	2747	2111	2257	2747A	B
2745	1923	1934	2746A	B								
2746	2032	2105	2746A	B		205100	W140.2					
2746	2111	2121	2747A	B								
2747	2220	2256	2747A	B		223817	W167.0					
2747	2258	2309	2751R	A								
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2735	0142	0240	2737R	A		020429	W038.6		0142	0331	2737R	A
2736	0331	0427	2737R	B		035146	W065.4		0331	0521	2737R	B
2737	0526	0614	2738R	B		053902	W092.2		0526	0711	2738R	B
2738	0716	0801	2739A	B	1N	072619	W119.0		0716	0854	2739A	B
2739	0859	0949	2740A	B		091335	W145.8		0859	1041	2740A	B
2740	1046	1136	2741A	B		110052	W172.7		1046	1225	2741A	B
2741	1230	1323	2742A	B		124808	E160.5		1230	1409	2742A	B
2742	1413	1510	2743A	B		143525	E133.7		1413	1553	2743A	B
2743	1559	1658	2744A	B		162241	E106.9		1557	1734	2744A	B
2744	1747	1845	2745A	B		180958	E080.1		1739	1918	2745A	B
2745	1934	2032	2746A	B		195714	E053.3		1923	2106	2746A	B
2746	2121	2220	2747A	B		214431	E026.4		2111	2257	2747A	B
2747	2309	0007	2751R	A		233147	W000.4		2258	0056	2750R	A

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
4 JULY 1973

THIR						ASC. AND DESC. NODE		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2748	0007	0056	2751R	A		002533	E166.2	2748	2258	0056	2750R	A
2749						021250	E139.4	2750	0251	0442	2750R	B
2750	0341	0430	2750R	B		040007	E112.6	2751	0447	0622	2751R	B
2751	0529	0618	2751R	B		054723	E085.7	2752	0628	0806	2752A	B
2752	0716	0805	2752A	B		073440	E058.9	2753	0811	0952	2753A	B
2753	0903	0951	2753A	B		092156	E032.1	2754	0957	1142	2754A	B
2754	1051	1139	2754A	B		110913	E005.3	2755	1147	1326	2755A	B
2755	1238	1326	2755A	B		125629	W021.6	2756	1332	1509	2756A	B
2756	1425	1508	2756A	B		144346	W048.4	2757	1514	1650	2757A	B
2757	1612	1650	2757A	B		163102	W075.2	2758	1655	1835	2758A	B
2757	1656	1701	2758A	B				2759	1840	2020	2759A	B
2758	1800	1834	2758A	B		181819	W102.0	2760	2025	2208	2760A	B
2758	1840	1849	2759A	B								
2759	1947	2019	2759A	B		200535	W128.8					
2759	2025	2036	2760A	B								
2760	2134	2205	2760A	B		215252	W155.7					
2761						234008	E177.5					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2748						011904	W027.2	0251	0442	2750R	B	
2749	0251	0341	2750R	B		030620	W054.0	0447	0623	2751R	B	
2750	0430	0452	2750R	B		045337	W080.8	0628	0806	2752A	B	
2750	0448	0529	2751R	B				0811	0952	2753A	B	
2751	0628	0716	2752A	B		064053	W107.7	0957	1142	2754A	B	
2752	0811	0903	2753A	B		082810	W134.5	1147	1327	2755A	B	
2753	0957	1051	2754A	B		101527	W161.3	1331	1509	2756A	B	
2754	1147	1238	2755A	B		120243	E171.9	1514	1651	2757A	B	
2755	1332	1425	2756A	B		135000	E145.1	1655	1835	2758A	B	
2756	1514	1612	2757A	B		153716	E118.2	1840	2020	2759A	B	
2757	1701	1800	2758A	B		172433	E091.4	2025	2208	2760A	B	
2758	1849	1947	2759A	B		191149	E064.6					
2759	2036	2134	2760A	B		205906	E037.8					
2760						224622	E011.0					
2761	0012	0109	2764R	A		003339	W015.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
5 JULY 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2762	0109	0158	2764R	A		012725	E150.7	2762	0012	0207	2764R	A
2763	0256	0345	2763R	B		031441	E123.9	2763	0158	0355	2763R	B
2764	0443	0532	2764R	B		050158	E097.1	2764	0401	0537	2764R	B
2765	0631	0719	2765A	B		064914	E070.3	2765	0543	0721	2765A	B
2766	0818	0906	2766A	B		083631	E043.4	2766	0725	0906	2766A	B
2767	1005	1054	2767A	B		102347	E016.6	2767	0912	1057	2767A	B
2768	1152	1241	2768A	B		121104	W010.2	2768	1102	1243	2768A	B
2769	1340	1424	2769A	B		135821	W037.0	2769	1248	1424	2769A	B
2770	1527	1608	2770A	B		154537	W063.8	2770	1429	1608	2770A	B
2771	1714	1749	2771A	B		173254	W090.7	2771	1613	1750	2771A	B
2771	1755	1803	2772A	B				2772	1755	1935	2772A	B
2772	1901	1934	2772A	B		192010	W117.5	2773	1940	2122	2773A	B
2772	1940	1950	2773A	B				2774	2127	2312	2774A	B
2773	2049	2122	2773A	B		210727	W144.3					
2773	2127	2138	2774A	B								
2774	2236	2312	2774A	B		225443	W171.1					
2774	2314	2325	2777R	A								
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2762	0158	0207	2764R	A		022055	W042.7		0011	0207	2764R	A
2762	0158	0256	2763R	B					0158	0355	2763R	B
2763	0401	0443	2764R	B		040812	W069.5		0401	0538	2764R	B
2764	0532	0537	2764R	B		055528	W096.3		0543	0721	2765A	B
2764	0543	0631	2765A	B					0725	0906	2766A	B
2765	0725	0818	2766A	B		074245	W123.1		0913	1057	2767A	B
2766	0912	1005	2767A	B		093001	W150.0		1102	1243	2768A	B
2767	1102	1152	2768A	B		111718	W176.8		1248	1425	2769A	B
2768	1248	1340	2769A	B		130434	E156.4		1430	1608	2770A	B
2769	1430	1527	2770A	B		145151	E129.6		1613	1750	2771A	B
2770	1616	1714	2771A	B		163907	E102.8		1755	1935	2772A	B
2771	1803	1901	2772A	B		182624	E076.0		1940	2122	2773A	B
2772	1950	2049	2773A	B		201340	E049.2		2127	2313	2774A	B
2773	2138	2236	2774A	B		220057	E022.3		2314	0112	2777R	A
2774	2325	0023	2777R	A		234814	W004.5					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
6 JULY 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2775	0023	0112	2777R	A		004200	E162.1	2775	2314	0112	2777R	A
2776						022916	E135.2	2777	0306	0453	2777R	B
2777	0358	0447	2777R	B		041633	E108.4	2778	0459	0639	2778R	B
2778	0545	0634	2778R	B		060349	E081.6	2779	0645	0823	2779A	B
2779	0732	0821	2779A	B		075106	E054.8	2780	0828	1010	2780A	B
2780	0920	1009	2780A	B		093822	E028.0	2781	1015	1158	2781A	B
2781	1107	1156	2781A	B		112539	E001.1	2782	1303	1343	2782A	B
2782	1254	1342	2782A	B		131255	W025.7	2783	1348	1524	2783A	B
2783	1441	1523	2783A	B		150012	W052.5	2784	1529	1706	2784A	B
2784	1629	1705	2784A	B		164728	W079.3	2785	1711	1843	2785A	B
2784	1711	1718	2785A	B				2786	1856	2036	2786A	B
2785	1816	1850	2785A	B		183445	W106.1	2787	2041	2223	2787A	B
2785	1856	1905	2786A	B				2788	2228	0030	2788R	A
2786	2003	2036	2786A	B		202201	W133.0					
2786	2041	2052	2787A	B								
2787	2151	2223	2787A	B		220918	W159.8					
2787	2228	2239	2791R	A								
2788	2338	0027	2791R	A		235634	E173.4					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2775						013530	W031.3	0306	0454	2777R	B	
2776	0307	0358	2777R	B		032247	W058.1	0459	0640	2778R	B	
2777	0447	0453	2777R	B		051003	W085.0	0645	0823	2779A	B	
2777	0459	0545	2778R	B				0828	1010	2780A	B	
2778	0634	0639	2778R	B		065720	W111.8	1015	1159	2781A	B	
2778	0645	0732	2779A	B				1203	1343	2782A	B	
2779	0828	0920	2780A	B		084436	W138.6	1348	1524	2783A	B	
2780	1015	1107	2781A	B		103153	W165.4	1529	1706	2784A	B	
2781	1203	1254	2782A	B		121909	E167.8	1710	1844	2785A	B	
2782	1348	1441	2783A	B		140626	E141.0	1855	2037	2786A	B	
2783	1530	1629	2784A	B		155342	E114.1	2041	2223	2787A	B	
2784	1718	1816	2785A	B		174059	E087.3	2227	0030	2791R	A	
2785	1905	2003	2786A	B		192815	E060.5					
2786	2052	2151	2787A	B		211532	E033.7					
2787	2239	2338	2791R	A		230248	E006.9					
2788						005005	W020.0					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
7 JULY 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2789						014351	E146.6	2790	0243	0409	2790R	B
2790	0312	0401	2790R	B		033108	E119.8	2791	0414	0555	2791R	B
2791	0500	0549	2791R	B		051824	E093.0	2792	0601	0731	2792A	B
2792	0647	0736	2792A	B		070541	E066.2	2793	0741	0923	2793A	B
2793	0834	0923	2793A	B		085257	E039.3	2794	0929	1113	2794A	B
2794	1021	1110	2794A	B		104014	E012.5	2795	1118	1258	2795A	B
2795	1209	1257	2795A	B		122730	W014.3	2796	1302	1441	2796A	B
2796	1356	1440	2796A	B		141447	W041.1	2797	1446	1623	2797A	B
2797	1543	1623	2797A	B		160203	W067.9	2798	1628	1806	2798A	B
2798	1731	1804	2798A	B		174920	W094.8	2799	1811	1950	2799A	B
2798	1811	1819	2799A	B				2800	1956	2142	2800A	B
2799	1918	1950	2799A	B		193636	W121.6	2801	2142	2331	2804R	A
2799	1955	2007	2800A	B								
2800	2105	2141	2800A	B		212353	W148.4					
2800	2143	2154	2804R	A								
2801	2252	2331	2804R	A		231109	W175.2					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2789	0244	0312	2790R	B		023721	W046.8		0243	0409	2790R	B
2790	0401	0409	2790R	B		042438	W073.6		0414	0555	2791R	B
2790	0414	0500	2791R	B					0600	0737	2792A	B
2791	0549	0554	2791R	B		061154	W100.4		0741	0924	2793A	B
2791	0600	0647	2792A	B					0929	1114	2794A	B
2792	0741	0834	2793A	B		075911	W127.2		1118	1258	2795A	B
2793	0929	1021	2794A	B		094628	W154.1		1302	1441	2796A	B
2794	1118	1209	2795A	B		113344	E179.1		1446	1624	2797A	B
2795	1302	1356	2796A	B		132101	E152.3		1628	1806	2798A	B
2796	1446	1543	2797A	B		150817	E125.5		1810	1950	2799A	B
2797	1632	1731	2798A	B		165534	E098.7		1955	2142	2800A	B
2798	1819	1918	2799A	B		184250	E071.8		2143	2331	2804R	A
2799	2007	2105	2800A	B		203007	E045.0					
2800	2154	2252	2804R	A		221723	E018.2					
2801						000440	W008.6					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
8 JULY 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2802						005826	E158.0	2804	0320	0508	2804R	B
2803						024542	E131.1	2805	0514	0700	2805R	B
2804	0414	0503	2804R	B		043259	E104.3	2806	0705	0839	2806A	B
2805	0601	0650	2805R	B		062015	E077.5	2807	0844	1025	2807A	B
2806	0749	0838	2806A	B		080732	E050.7	2808	1032	1214	2808A	B
2807	0936	1025	2807A	B		095448	E023.9	2809	1219	1359	2809A	B
2808	1123	1212	2808A	B		114205	W003.0	2810	1404	1540	2810A	B
2809	1311	1358	2809A	B		132922	W029.8	2811	1544	1721	2811A	B
2810	1458	1539	2810A	B		151638	W056.6	2812	1727	1904	2812A	B
2811	1645	1720	2811A	B		170355	W083.4	2813	1912	2055	2813A	B
2811	1725	1734	2812A	B				2814	2100	2242	2814A	B
2812	1832	1904	2812A	B		185111	W110.2					
2812	1909	1921	2813A	B								
2813	2020	2055	2813A	B		203828	W137.1					
2813	2100	2109	2814A	B								
2814	2207	2241	2814A	B		222544	W163.9					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2802						015156	W035.4	0321	0508	2804R	B	
2803	0321	0414	2804R	B		033913	W062.3	0514	0700	2805R	B	
2804	0514	0601	2805R	B		052629	W089.1	0705	0839	2806A	B	
2805	0650	0700	2805R	B		071346	W115.9	0844	1026	2807A	B	
2805	0705	0749	2806A	B				1032	1215	2808A	B	
2806	0844	0936	2807A	B		090102	W142.7	1219	1359	2809A	B	
2807	1032	1123	2808A	B		104819	W169.5	1404	1539	2810A	B	
2808	1220	1311	2809A	B		123535	E163.7	1545	1721	2811A	B	
2809	1404	1458	2810A	B		142252	E136.9	1725	1905	2812A	B	
2810	1547	1645	2811A	B		161008	E110.0	1909	2055	2813A	B	
2811	1734	1832	2812A	B		175725	E083.2	2100	2242	2814A	B	
2812	1921	2020	2813A	B		194441	E056.4					
2813	2109	2207	2814A	B		213158	E029.6					
2814						231915	E002.8					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
9 JULY 1973

THIR							ASC. AND DESC. NODE		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2815						001301	E169.3	2817	0240	0430	2817R	B
2816	0141	0230	2817R	B		020017	E142.5	2818	0431	0611	2818R	B
2817	0329	0418	2817R	A		034734	E115.7	2819	0616	0744	2819A	B
2818	0516	0605	2818R	B		053450	E088.9	2820	0758	0940	2820A	B
2819	0703	0752	2819A	B		072207	E062.1	2821	0945	1130	2821A	B
2820	0851	0939	2820A	B		090923	E035.2	2822	1135	1314	2822A	B
2821	1038	1127	2821A	B		105640	E008.4	2823	1319	1457	2823A	B
2822	1225	1314	2822A	B		124356	W018.4	2824	1502	1636	2824A	B
2823	1412	1456	2823A	B		143113	W045.2	2825	1643	1820	2825A	B
2824	1600	1636	2824A	B		161829	W072.1	2826	1826	2007	2826A	B
2824	1642	1649	2825A	B				2827	2012	2158	2827A	B
2825	1747	1821	2825A	B		180546	W098.9	2828	2159	2354	2831R	A
2825	1826	1836	2826A	B								
2826	1934	2007	2826A	B		195302	W125.7					
2826	2012	2023	2827A	B								
2827	2121	2157	2827A	B		214019	W152.5					
2827	2159	2210	2833A	A								
2828	2309	2358	2833A	A		232736	W179.4					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2815	0049	0141	2817R	B		010631	W024.1	0022	0239	2817R	B	
2816	0230	0238	2817R	B		025348	W050.9	0240	0429	2817R	A	
2816	0240	0329	2817R	A				0430	0611	2818R	B	
2817	0418	0430	2817R	A		044104	W077.7	0616	0753	2819A	B	
2817	0431	0516	2818R	B				0758	0940	2820A	B	
2818	0605	0611	2818R	B		062821	W104.5	0945	1130	2821A	B	
2818	0616	0703	2819A	B				1135	1314	2822A	B	
2819	0758	0851	2820A	B		081537	W131.3	1319	1457	2823A	B	
2820	0945	1038	2821A	B		100254	W158.2	1502	1636	2824A	B	
2821	1135	1225	2822A	B		115010	E175.0	1642	1820	2825A	B	
2822	1319	1412	2823A	B		133727	E148.2	1826	2008	2826A	B	
2823	1502	1600	2824A	B		152443	E121.4	2012	2158	2827A	B	
2824	1649	1747	2825A	B		171200	E094.6	2159	2241	2833R	A	
2825	1836	1934	2826A	B		185916	E067.7					
2826	2023	2121	2827A	B		204633	E040.9					
2827	2210	2309	2833A	A		223349	E014.1					
2828						002106	W012.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
10 JULY 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2829						011452	E153.9	2831	0344	0546	2831R	B
2830						030209	E127.0	2833	0720	0852	2833A	B
2831	0431	0519	2832R	B		044925	E100.2	2834	0858	1045	2834A	B
2832						063642	E073.4	2835	1051	1231	2835A	B
2833	0805	0852	2833A	B		082358	E046.6	2836	1235	1412	2836A	B
2834	0952	1041	2834A	B		101115	E019.8	2837	1417	1557	2837A	B
2835	1140	1229	2835A	B		115831	W007.1	2838	1603	1737	2838A	B
2836	1327	1412	2836A	B		134548	W033.9	2839	1743	1922	2839A	B
2837	1514	1557	2837A	B		153304	W060.7	2840	1928	2109	2840A	B
2838	1701	1737	2838A	B		172021	W087.5	2841	2114	2257	2841A	B
2838	1742	1750	2839A	B	1N							
2839	1849	1921	2839A	B	1N	190737	W114.3					
2839	1927	1938	2840A	B								
2840	2036	2109	2840A	B		205454	W141.2					
2840	2114	2125	2841A	B								
2841	2223	2257	2841A	B		224210	W168.0					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2829						020822	W039.5	0345	0546	2832R	B	
2830	0345	0431	2832R	B		035539	W066.4	0720	0853	2833R	B	
2831	0519	0546	2832R	B		054255	W093.2	0858	1046	2834A	B	
2832	0720	0805	2833A	B		073012	W120.0	1051	1231	2835A	B	
2833	0859	0952	2834A	B		091729	W146.8	1235	1413	2836A	B	
2834	1054	1140	2835A	B		110445	W173.6	1418	1557	2837A	B	
2835	1236	1327	2836A	B		125202	E159.6	1603	1738	2838A	B	
2836	1418	1514	2837A	B		143918	E132.8	1742	1922	2839A	B	
2837	1603	1701	2838A	B		162635	E105.9	1927	2110	2840A	B	
2838	1750	1849	2839A	B	1S	181351	E079.1	2114	2258	2841A	B	
2839	1938	2036	2840A	B		200108	E052.3					
2840	2125	2223	2841A	B		214824	E025.5					
2841						233541	W001.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
11 JULY 1973

THIR							ESMR			
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2842						002927	E165.2	2843	0201	0317	2844R	A
2843	0201	0247	2844R	A		021643	E138.4	2844	0316	0442	2844R	B
2844	0345	0434	2844R	B		040400	E111.6	2845	0447	0628	2845R	B
2845	0532	0621	2845R	B		055116	E084.7	2846	0634	0809	2846A	B
2846	0720	0809	2846A	B		073833	E057.9	2847	0816	0957	2847A	B
2847	0907	0956	2847A	B		092549	E031.1	2848	1003	1146	2848A	B
2848	1054	1143	2848A	B		111306	E004.3	2849	1152	1331	2849A	B
2849	1241	1330	2849A	B		130023	W022.6	2850	1337	1513	2850A	B
2850	1429	1513	2850A	B		144739	W049.4	2851	1518	1656	2851A	B
2851	1616	1656	2851A	B		163456	W076.2	2852	1702	1836	2852A	B
2852	1803	1836	2852A	B		182212	W103.0	2853	1843	2023	2853A	B
2852	1842	1852	2853A	B				2854	2029	2214	2854A	B
2853	1951	2023	2853A	B		200929	W129.8	2855	2216	0014	2858R	A
2853	2028	2039	2854A	B								
2854	2138	2214	2854A	B		215645	W156.7					
2854	2216	2227	2858R	A								
2855	2325	0014	2858R	A		234402	E176.6					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2842						012257	W028.2		0201	0316	2844R	A
2843	0247	0316	2844R	A		031014	W055.0		0316	0443	2844R	B
2843	0316	0345	2844R	B					0447	0629	2845R	B
2844	0434	0441	2844R	B		045730	W081.8		0634	0810	2846A	B
2844	0447	0532	2845R	B					0815	0958	2847A	B
2845	0621	0628	2845R	B		064447	W108.6		1003	1147	2848A	B
2845	0634	0720	2846A	B					1152	1332	2849A	B
2846	0815	0907	2847A	B		083203	W135.5		1337	1513	2850A	B
2847	1003	1054	2848A	B		101920	W162.3		1518	1657	2851A	B
2848	1152	1241	2849A	B		120636	E170.9		1702	1837	2852A	B
2849	1337	1429	2850A	B		135353	E144.1		1841	2023	2853A	B
2850	1518	1616	2851A	B		154109	E117.3		2028	2215	2854A	B
2851	1705	1803	2852A	B		172826	E090.5		2215	0014	2858R	A
2852	1852	1951	2853A	B		191543	E063.6					
2853	2039	2138	2854A	B		210259	E036.8					
2854	2227	2325	2858R	A		225016	E010.0					
2855						003732	W016.8					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
12 JULY 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2856						013118	E149.8	2858	0401	0542	2858R	B
2857						031835	E122.9	2859	0547	0724	2859A	B
2858	0447	0536	2858R	B		050551	E096.1	2860	0729	0911	2860A	B
2859	0634	0723	2859A	B		065308	E069.3	2861	0916	1100	2861A	B
2860	0821	0910	2860A	B		084024	E042.5	2862	1106	1241	2862A	B
2861	1009	1058	2861A	B		102741	E015.6	2863	1251	1429	2863A	B
2862	1156	1245	2862A	B		121457	W011.2	2864	1434	1613	2864A	B
2863	1343	1429	2863A	B		140214	W038.0	2865	1618	1754	2865A	B
2864	1531	1613	2864A	B		154930	W064.8	2866	1759	1940	2866A	B
2865	1718	1753	2865A	B		173647	W091.6	2867	1946	2127	2867A	B
2865	1759	1807	2866A	B				2868	2132	2312	2868A	B
2866	1905	1940	2866A	B		192403	W118.5					
2866	1946	1954	2867A	B								
2867	2052	2125	2867A	B		211120	W145.3					
2867	2132	2141	2868A	B								
2868	2240	2314	2868A	B		225836	W172.1					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2856						022449	W043.6		0401	0542	2858R	B
2857	0401	0447	2858R	B		041205	W070.5		0547	0725	2859A	B
2858	0536	0541	2858R	B		055922	W097.3		0729	0911	2860A	B
2858	0547	0634	2859A	B					0916	1101	2861A	B
2859	0729	0821	2860A	B		074638	W124.1		1106	1246	2862A	B
2860	0916	1009	2861A	B		093355	W150.9		1251	1429	2863A	B
2861	1106	1156	2862A	B		112111	W177.7		1434	1614	2864A	B
2862	1251	1343	2863A	B		130828	E155.4		1618	1754	2865A	B
2863	1434	1531	2864A	B		145544	E128.6		1759	1941	2866A	B
2864	1619	1718	2865A	B		164301	E101.8		1946	2127	2867A	B
2865	1807	1905	2866A	B		183017	E075.0		2132	2313	2868A	B
2866	1954	2052	2867A	B		201734	E048.1					
2867	2141	2240	2868A	B		220450	E021.3					
2868						235207	W005.5					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
13 JULY 1973

THIR							ASC. AND DESC. NODE		ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR		TIME	LONG				INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO		HRMNSS	DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR						ASC. NODE						
2869							004553	E161.1	2870	0216	0341	2872R	A
2870	0216	0303	2872R	A			023310	E134.3	2872	0500	0643	2872R	B
2871							042026	E107.5	2873	0649	0826	2873A	B
2872	0549	0638	2872R	B			060743	E080.6	2874	0833	1013	2874A	B
2873	0736	0825	2873A	B			075459	E053.8	2875	1018	1202	2875A	B
2874	0923	1012	2874A	B			094216	E027.0	2876	1207	1347	2876A	B
2875	1110	1159	2875A	B			112932	E000.2	2877	1352	1527	2877A	B
2876	1258	1346	2876A	B			131649	W026.6	2878	1533	1709	2878A	B
2877	1445	1527	2877A	B			150405	W053.5	2879	1715	1854	2879A	B
2878	1632	1709	2878A	B			165122	W080.3	2880	1859	2039	2880A	B
2878	1715	1721	2879A	B					2881	2045	2228	2881A	B
2879	1820	1853	2879A	B			183838	W107.1					
2879	1859	1909	2880A	B									
2880	2007	2039	2880A	B			202555	W133.9					
2880	2045	2056	2881A	B									
2881	2154	2228	2881A	B			221311	W160.8					
2881	2232	2243	2885R	A									
	NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR				
2869							013923	W032.3	0215	0341	2872R	A	
2870	0303	0341	2872R	A			032640	W059.1	0500	0644	2872R	B	
2871	0500	0549	2872R	B			051356	W086.0	0649	0826	2873A	B	
2872	0649	0736	2873A	B			070113	W112.8	0833	1013	2874A	B	
2873	0833	0923	2874A	B			084830	W139.6	1018	1203	2875A	B	
2874	1018	1110	2875A	B			103546	W166.4	1207	1347	2876A	B	
2875	1207	1258	2876A	B			122303	E166.8	1352	1528	2877A	B	
2876	1352	1445	2877A	B			141019	E140.0	1533	1710	2878A	B	
2877	1534	1632	2878A	B			155736	E113.2	1714	1854	2879A	B	
2878	1721	1820	2879A	B			174452	E086.4	1859	2040	2880A	B	
2879	1909	2007	2880A	B			193209	E059.5	2044	2228	2881A	B	
2880	2056	2154	2881A	B			211925	E032.7	2231	0030	2885R	A	
2881	2243	2341	2885R	A			230642	E005.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
14 JULY 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D	THIR GRID	ASC. AND DESC. NODE					INT ORBIT	H D
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S	CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	R S
	DAYTIME THIR					ASC. NODE						
2882	2341	0030	2858R	A		000028	E172.4	2882	2231	0030	2885R	A
2883						014744	E145.6	2884	0247	0414	2884R	B
2884	0316	0405	2884R	B		033501	E118.8	2885	0419	0558	2885R	B
2885	0503	0552	2885R	B		052217	E092.2	2886	0604	0742	2886A	B
2886	0650	0739	2886A	B		070934	E065.1	2887	0747	0930	2887A	B
2887	0838	0927	2887A	B		085650	E038.3	2888	0935	1116	2888A	B
2888*	1025	1114	2888A	B		104407	E011.5	2889	1122	1302	2889A	B
2889	1212	1302	2889A	B		123123	W015.3	2890	1308	1444	2890A	B
2890	1400	1444	2890A	B		141840	W042.1	2891	1449	1627	2891A	B
2891	1547	1627	2891A	B		160556	W069.0	2892	1633	1810	2892A	B
2892	1734	1809	2892A	B		175313	W095.8	2893	1815	1955	2893A	B
2892	1815	1823	2893A	B				2894	2000	2142	2894A	B
2893	1921	1954	2893A	B		194030	W122.6					
2893	2000	2010	2894A	B								
2894	2109	2141	2894A	B		212746	W149.4					
2895						231503	W176.2					

* NO 6.7 DATA

	NIGHTTIME THIR				DESC. NODE		NEMS - SCR - ITPR			
2882					005358	W020.9	0247	0415	2884R	B
2883	0247	0316	2884R	B	024115	W047.8	0419	0559	2885R	B
2884	0405	0414	2884R	B	042831	W074.6	0604	0742	2886A	B
2884	0419	0503	2885R	B			0747	0930	2887A	B
2885	0552	0558	2885R	B	061548	W101.4	0935	1117	2888A	B
2885	0604	0650	2886A	B			1122	1303	2889A	B
2886	0747	0838	2887A	B	080304	W128.2	1308	1444	2890A	B
2887	0935	1025	2888R	B	095021	W155.0	1449	1628	2891A	B
2888	1122	1212	2889A	B	113737	E178.2	1633	1810	2892A	B
2889	1308	1400	2890A	B	132454	E151.3	1815	1955	2893A	B
2890	1449	1547	2891A	B	151210	E124.5	2000	2142	2894A	B
2891	1636	1734	2892A	B	165927	E097.7				
2892	1823	1921	2893A	B	184644	E070.9				
2893	2010	2109	2894A	B	203400	E044.0				
2894					2[illegible]17	E0 7.2				
2895					000833	W009.6				

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
15 JULY 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR	ASC. AND DESC. NODE					INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR					ASC. NODE						
2896						010219	E157.0	2897	0133	0324	2898R	A
2897	0230	0319	2898R	A		024936	E130.2	2898	0324	0512	2898R	B
2898	0418	0507	2898R	B	1N	043652	E103.4	2899	0518	0703	2899R	B
2899	0605	0654	2899R	B		062409	E076.5	2900	0708	0843	2900A	B
2900	0752	0841	2900A	B		081125	E049.7	2901	0848	1028	2901A	B
2901	0940	1028	2901A	B		095842	E022.9	2902	1034	1218	2902A	B
2902	1127	1216	2902A	B		114558	W003.9	2903	1223	1402	2903A	B
2903	1314	1402	2903A	B		133315	W030.7	2904	1407	1543	2904A	B
2904	1501	1543	2904A	B		152031	W057.6	2905	1548	1725	2905A	B
2905	1649	1725	2905A	B		170748	W084.4	2906	1731	1909	2906A	B
2905	1730	1738	2906A	B				2907	1915	2056	2907A	B
2906	1836	1909	2906A	B		185504	W111.2	2908	2102	2248	2908A	B
2906	1914	1925	2907A	B								
2907	2023	2055	2907A	B		204221	W138.0					
2907	2101	2112	2908A	B								
2908	2210	2247	2908A	B		222937	W164.8					
2908	2249	2259	2912R	A								
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2896	0134	0230	2898R	A		015550	W036.4		0134	0324	2898R	A
2897	0324	0418	2898R	B	1S	034306	W063.2		0325	0513	2898R	B
2898	0507	0512	2898R	B	1S	053023	W090.0		0518	0703	2899R	B
2898	0518	0605	2899R	B					0708	0843	2900A	B
2899	0654	0703	2999R	B		071739	W116.9		0848	1029	2901A	B
2899	0708	0752	2900A	B					1034	1218	2902A	B
2900	0848	0940	2901A	B		090456	W143.7		1223	1403	2903A	B
2901	1034	1127	2902A	B		105212	W170.5		1407	1543	2904A	B
2902	1223	1314	2903A	B		123929	E162.7		1548	1726	2905A	B
2903	1407	1501	2904A	B		142645	E135.9		1730	1909	2906A	B
2904	1550	1649	2905A	B		161402	E109.1		1914	2056	2907A	B
2905	1738	1836	2906A	B		180118	E082.3		2101	2248	2908A	B
2906	1925	2023	2907A	B		194835	E055.4		2249	0047	2912R	A
2907	2112	2210	2908A	B		213551	E028.6					
2908	2259	2358	2912R	A		232308	E001.8					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
16 JULY 1973

THIR							ASC. AND DESC. NODE		ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR						INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO		TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR						ASC. NODE						
2909	2358	0047	2912R	A			001654	E168.3	2909	2248	0047	2911R	A
2910							020410	E141.5	2911	0243	0438	2912R	B
2911	0332	0421	2912R	B			035127	E114.7	2913	0624	0758	2913A	B
2912							053843	E087.9	2914	0804	0942	2914A	B
2913	0707	0756	2913A	B			072600	E061.1	2915	0948	1133	2915A	B
2914	0854	0942	2914A	B			091316	E034.2	2916	1138	1318	2916A	B
2915	1041	1130	2915A	B			110033	E007.4	2917	1323	1501	2917A	B
2916	1229	1317	2916A	B			124750	W019.4	2918	1506	1644	2918A	B
2917	1416	1501	2917A	B			143506	W046.2	2919	1649	1824	2920A	B
2918	1603	1643	2918A	B			162223	W073.1	2920	1829	2015	2920A	A
2919	1750	1836	2920A	B			180939	W099.9	2921	2016	2159	2921A	B
2919	1826	1839	2920A	A									
2920	1938	2014	2920A	A			195656	W126.7					
2920	2015	2027	2921A	B									
2921	2125	2158	2921A	B			214412	W153.5					
2922							233129	E179.7					
	NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR				
2909							011024	W025.0		0243	0438	2912R	B
2910	0243	0332	2912R	B			025741	W051.8		0621	0758	2913A	B
2911	0421	0438	2912R	B			044457	W078.7		0804	0942	2914A	B
2912	0621	0707	2913A	B			063214	W105.5		0948	1133	2915A	B
2913	0804	0854	2914A	B			081931	W132.3		1138	1318	2916A	B
2914	0948	1041	2915A	B			100647	W159.1		1323	1502	2917A	B
2915	1138	1229	2916A	B			115404	E174.1		1506	1644	2918A	B
2916	1323	1416	2917A	B			134121	E147.2		1649	1829	2920A	B
2917	1506	1603	2918A	B			152837	E120.4		1826	2015	2920A	A
2918	1652	1750	2920A	B			171553	E093.6		2015	2159	2921A	B
2919	1839	1938	2920A	A			190310	E066.8					
2920	2027	2125	2921A	B			205026	E040.0					
2921							223743	E013.1					
2922	0004	0100	2925R	A			002459	W013.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
17 JULY 1973

THIR								ESMR				
	11.5 + 6.7		INT ORBIT	H D R S	THIR GRID CORR	ASC. AND DESC. NODE					INT ORBIT	H D R S
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN		LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	
	DAYTIME THIR					ASC. NODE						
2923	0100	0148	2925R	A		011845	E152.9	2923	0004	0158	2925R	A
2924	0247	0336	2924R	B		030602	E126.1	2924	0152	0346	2924R	B
2925	0434	0523	2925R	B		045318	E099.3	2925	0354	0531	2925R	B
2926	0621	0710	2926R	B		064035	E072.4	2927	0725	0858	2927A	B
2927	0809	0857	2927A	B		082751	E045.6	2928	0902	1047	2928A	B
2928	0956	1045	2928A	B		101508	E018.8	2929	1053	1234	2929A	B
2929	1143	1221	2929A	B		120224	W008.0	2930	1240	1416	2930A	B
2930	1330	1416	2930A	B		134941	W034.9	2931	1421	1600	2931A	B
2931	1518	1559	2931A	B		153657	W061.7	2932	1605	1741	2932A	B
2932	1705	1740	2932A	B		172414	W088.5	2933	1747	1926	2933A	B
2932	1746	1754	2933A	B				2934	1932	2114	2934A	B
2933	1852	1925	2933A	B		191130	W115.3	2935	2119	2303	2935A	B
2933	1931	1941	2934A	B								
2934	2040	2113	2934A	B		205847	W142.1					
2934	2119	2128	2935A	B								
2935	2227	2302	2935A	B		224603	W168.9					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2923	0148	0159	2925R	A		021216	W040.5		0003	0159	2925R	A
2923	0152	0247	2924R	B					0153	0347	2924R	B
2924	0336	0348	2924R	B		035932	W067.3		0354	0531	2925R	B
2924	0354	0434	2925R	B					0536	0720	2926R	B
2925	0523	0531	2925R	B		054649	W094.2		0725	0858	2927A	B
2925	0536	0621	2926R	B					0902	1048	2928A	B
2926	0710	0719	2926R	B		073405	W121.0		1053	1235	2929A	B
2926	0725	0809	2927A	B					1240	1417	2930A	B
2927	0902	0956	2928A	B		092122	W147.8		1421	1600	2931A	B
2928	1053	1143	2929A	B		110838	W174.6		1605	1741	2932A	B
2929	1240	1330	2930A	B		125555	E158.6		1746	1926	2933A	B
2930	1421	1518	2931A	B		144311	E131.8		1931	2114	2934A	B
2931	1607	1705	2932A	B		163028	E104.9		2119	2303	2935A	B
2932	1754	1852	2933A	B		181745	E078.1		2331	0129	2939R	A
2933	1941	2040	2934A	B		200501	E051.3					
2934	2128	2227	2935A	B		215218	E024.5					
2935	2331	0014	2939R	A		233934	W002.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
18 JULY 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2936	0014	0103	2939R	A		003320	E164.2	2938	0258	0349	2938R	B
2937						022036	E137.4	2939	0450	0636	2939R	B
2938	0349	0438	2938R	B		040753	E110.6	2940	0641	0813	2940A	B
2939	0536	0625	2939R	B		055510	E083.8	2941	0818	1000	2941A	B
2940	0723	0812	2940A	B		074226	E057.0	2942	1005	1148	2942A	B
2941	0910	0959	2941A	B		092943	E030.1	2943	1154	1335	2943A	B
2942	1058	1147	2942A	B		111659	E003.3	2944	1340	1516	2944A	B
2943	1245	1334	2943A	B		130416	W023.5	2945	1521	1657	2945A	B
2944	1432	1516	2944A	B		145132	W050.3	2946	1702	1841	2946A	B
2945	1619	1656	2945A	B		163849	W077.1	2947	1857	2030	2947A	B
2945	1702	1708	2946A	B				2948	2034	2215	2948A	B
2946	1807	1840	2946A	B		182605	W104.0					
2946	1846	1856	2947A	B								
2947	1954	2029	2947A	B		201322	W130.8					
2947	2035	2043	2948A	B								
2948	2141	2215	2948A	B		220038	W157.6					
2949	2329	0017	2952R	A		234755	E175.6					
	NIGHTTIME THIR					DESC. NODE		NEMS - SCR - ITPR				
2936	0103	0129	2939R	A		012651	W029.2	0258	0445	2938R	B	
2937	0258	0349	2938R	B		031407	W056.0	0450	0636	2939R	B	
2938	0438	0445	2938R	B		050124	W082.8	0641	0814	2940A	B	
2938	0450	0536	2939R	B				0818	1001	2941A	B	
2939	0625	0636	2939R	B		064840	W109.6	1005	1148	2942A	B	
2939	0641	0723	2940A	B				1155	1335	2943A	B	
2940	0818	0910	2941A	B		083557	W136.4	1340	1516	2944A	B	
2941	1005	1058	2942A	B		102313	W163.2	1521	1657	2945A	B	
2942	1155	1245	2943A	B		121030	E170.0	1702	1841	2946A	B	
2943	1340	1432	2944A	B		135746	E143.1	1846	2030	2947A	B	
2944	1521	1619	2945A	B		154503	E116.3	2034	2216	2948A	B	
2945	1708	1807	2946A	B		173219	E089.5					
2946	1856	1954	2947A	B		191936	E062.7					
2947	2043	2141	2948A	B		210652	E035.9					
2948	2245	2329	2952R	A		225409	E009.0					
2949	0017	0042	2952R	A		004125	W017.8					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
19 JULY 1973

THIR							ASC. AND DESC. NODE		ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR		TIME	LONG				INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	CALC		HRMNSS	DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR						ASC. NODE						
2950							013511	E148.8	2951	0206	0402	2951R	B
2951	0303	0352	2951R	B			032228	E121.9	2953	0551	0729	2953A	B
2952	0450	0539	2952R	B			050944	E095.1	2954	0733	0914	2954A	B
2953	0638	0727	2953A	B			065701	E068.3	2955	0919	1059	2955A	B
2954	0825	0913	2954A	B			084417	E041.5	2956	1109	1251	2956A	B
2955	1012	1101	2955A	B			103134	E014.7	2957	1256	1433	2957A	B
2956	1159	1248	2956A	B			121850	W012.2	2958	1438	1619	2958A	B
2957	1347	1432	2957A	B			140607	W039.0	2959	1623	1757	2959A	B
2958	1534	1618	2958A	B			155323	W065.8	2960	1803	1942	2960A	B
2959	1721	1757	2959A	B			174040	W092.6	2961	1948	2129	2961A	B
2959	1803	1810	2960A	B					2962	2159	2358	2965R	A
2960	1909	1942	2960A	B			192756	W119.4					
2960	1947	1957	2961A	B									
2961	2056	2128	2961A	B			211513	W146.3					
2962	2243	2332	2965R	A			230229	W173.1					
	NIGHTTIME THIR						DESC. NODE			NEMS - SCR - ITPR			
2950	0206	0303	2951R	B			022842	W044.6		0206	0402	2951R	B
2951	0352	0401	2951R	B			041558	W071.4		0551	0729	2953A	B
2951	0408	0450	2952R	B						0734	0914	2954A	B
2952	0539	0546	2952R	B			060315	W098.3		0919	1100	2955A	B
2952	0552	0638	2953A	B						1109	1251	2956A	B
2953	0734	0825	2954A	B			075032	W125.1		1256	1433	2957A	B
2954	0919	1012	2955A	B			093748	W151.9		1438	1619	2958A	B
2955	1109	1159	2956A	B			112505	W178.7		1623	1758	2959A	B
2956	1256	1347	2957A	B			131221	E154.5		1802	1942	2960A	B
2957	1438	1534	2958A	B			145938	E127.6		1947	2129	2961A	B
2958	1623	1721	2959A	B			164654	E100.8		2159	2358	2965R	A
2959	1810	1909	2960A	B			183411	E074.0					
2960	1957	2056	2961A	B			202127	E047.2					
2961	2200	2243	2965R	A			220844	E020.4					
2962	2332	2357	2965R	A			235600	W006.5					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
20 JULY 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2963						004946	E160.1	2964	0135	0334	2965R	B
2964	0218	0307	2965R	B		023703	E133.3	2966	0507	0651	2966R	B
2965						042419	E106.5	2967	0656	0830	2967A	B
2966	0552	0641	2966R	B		061136	E079.7	2968	0836	1017	2968A	B
2967	0739	0838	2967A	B		075852	E052.9	2969	1022	1207	2969A	B
2968	0927	1016	2968A	B		094609	E026.0	2970	1212	1351	2970A	B
2969	1114	1203	2969A	B		113325	W000.8	2971	1356	1532	2971A	B
2970	1301	1349	2970A	B		132042	W027.6	2972	1537	1713	2972A	B
2971	1449	1532	2971A	B		150758	W054.4	2973	1719	1857	2973A	B
2972	1636	1713	2972A	B		165515	W081.2	2974	1903	2046	2974A	B
2972	1719	1725	2973A	B				2975	2053	2232	2975A	B
2973	1823	1855	2973A	B		184231	W108.1					
2973	1903	1912	2974A	B								
2974	2010	2045	2974A	B		202948	W134.9					
2974	2053	2059	2975A	B								
2975	2158	2231	2975A	B		221704	W161.7					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2963	0135	0218	2965R	B		014317	W033.3		0135	0334	2965R	B
2964	0307	0334	2965R	B		033033	W060.1		0507	0651	2966R	B
2965	0507	0552	2966R	B		051750	W086.9		0656	0831	2967A	B
2966	0641	0650	2966R	B		070506	W113.7		0835	1017	2968A	B
2966	0656	0739	2967A	B					1022	1207	2969A	B
2967	0836	0927	2968A	B		085223	W140.6		1212	1351	2970A	B
2968	1022	1114	2969A	B		103939	W167.4		1355	1533	2971A	B
2969	1212	1301	2970A	B		122656	E165.8		1537	1714	2972A	B
2970	1356	1449	2971A	B		141412	E139.0		1719	1857	2973A	B
2971	1537	1636	2972A	B		160129	E112.2		1903	2046	2974A	B
2972	1725	1823	2973A	B		174846	E085.4		2053	2232	2975A	B
2973	1912	2010	2974A	B		193602	E058.6		2302	0059	2979R	B
2974	2059	2158	2975A	B		212319	E031.8					
2975	2302	2345	2979R	A		231035	E004.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
21 JULY 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LAL	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
2976	2345	0034	2979R	A		000421	E171.5	2976	2302	0037	2979R	A
2977						015137	E144.7	2978	0231	0418	2978R	B
2978	0319	0408	2978R	B		033854	E117.8	2979	0423	0604	2979R	B
2979	0507	0556	2979R	B		052610	E091.0	2980	0609	0745	2980A	B
2980	0654	0743	2980A	B		071327	E064.2	2981	0750	0931	2981A	B
2981	0841	0930	2981A	B		090043	E037.4	2982	0937	1122	2982A	B
2982	1029	1117	2982A	B		104800	E010.6	2983	1127	1307	2983A	B
2983	1216	1305	2983A	B		123516	W016.3	2984	1312	1452	2984A	B
2984	1403	1451	2984A	B		142233	W043.1	2985	1457	1633	2985A	B
2985	1550	1632	2985A	B		160949	W069.9	2986	1638	1812	2986A	B
2986	1738	1812	2986A	B		175706	W096.7	2987	1819	2002	2987A	B
2986	1817	1827	2988A	A				2988	2004	2145	2988A	B
2987	1925	2001	2988A	A		194422	W123.5	2989	2217	2349	2992R	A
2987	2002	2014	2988A	B								
2988	2112	2144	2988A	B		213139	W150.4					
2988	2150	2201	2993R	A								
2989	2259	2348	2993R	A		231856	W177.2					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
2976	0034	0101	2979R	A		005752	W021.9		0230	0418	2978R	B
2977	0230	0319	2978R	B		024508	W048.7		0423	0605	2979R	A
2978	0408	0417	2978R	B		043225	W075.5		0609	0744	2980A	B
2978	0423	0507	2979R	B					0750	0931	2981A	B
2979	0556	0604	2979R	B		061941	W102.3		0937	1122	2982A	B
2979	0609	0654	2980A	B					1127	1307	2983A	B
2980	0750	0841	2981A	B		080658	W129.2		1312	1452	2984A	B
2981	0936	1029	2982A	B		095414	W156.0		1457	1633	2985A	B
2982	1127	1216	2983A	B		114131	E177.2		1638	1813	2986A	B
2983	1312	1403	2984A	B		132847	E150.4		1817	2002	2988A	B
2984	1457	1550	2985A	B		151604	E123.5		2002	2145	2988A	A
2985	1639	1738	2986A	B		170320	E096.7		2150	2349	2992R	A
2986	1827	1925	2988A	A		185037	E069.9					
2987	2014	2112	2988A	B		203753	E043.1					
2988	2201	2259	2993R	A		222510	E016.3					
2989						001226	W010.6					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
22 JULY 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
2990						010612	E156.0	2992	0152	0351	2992R	B
2991	0234	0323	2992R	B	1E	025329	E129.2	2993	0523	0706	2993R	B
2992						044045	E102.4	2994	0712	0846	2994A	B
2993	0609	0657	2993R	B		062802	E075.6	2995	0852	1033	2995A	B
2994	0756	0845	2994A	B		081518	E048.8	2996	1037	1222	2996A	B
2995	0943	1032	2995A	B		100235	E021.9	2997	1227	1406	2997A	B
2996	1130	1219	2996A	B		114951	W004.9	2998	1411	1548	2998A	B
2997	1318	1406	2997A	B		133708	W031.7	2999	1553	1729	2999A	B
2998	1505	1547	2998A	B		152424	W058.5	3000	1735	1913	3000A	B
2999	1652	1729	2999A	B		171141	W085.4	3001	1919	2103	3001A	B
2999	1735	1741	3000A	B				3002	2108	2249	3002A	B
3000	1839	1913	3000A	B		185857	W112.2					
3000	1918	1928	3001A	B								
3001	2027	2102	3001A	B		204614	W139.0					
3001	2109	2116	3002A	B								
3002	2214	2249	3002A	B		223330	W165.8					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
2990	0152	0234	2992R	B	1W	015943	W037.4	0152	0351	2992R	B	
2991	0323	0333	2992R	B	1W	034659	W064.2	0523	0707	2993R	B	
2992	0523	0609	2993R	B		053416	W091.0	0712	0847	2994A	B	
2993	0657	0706	2993R	B		072133	W117.8	0851	1033	2995A	B	
2993	0712	0756	2994A	B				1037	1222	2996A	B	
2994	0852	0943	2995A	B		090849	W144.7	1227	1407	2997A	B	
2995	1038	1130	2996A	B		105606	W171.5	1411	1548	2998A	B	
2996	1227	1318	2997A	B		124322	E161.7	1553	1730	2999A	B	
2997	1411	1505	2998A	B		143039	E134.9	1735	1913	3000A	B	
2998	1554	1652	2999A	B		161755	E108.1	1918	2103	3001A	B	
2999	1741	1839	3000A	B		180512	E081.3	2109	2249	3002A	B	
3000	1928	2027	3001A	B		195228	E054.4	2319	0118	3005R	A	
3001	2116	2214	3002A	B		213945	E027.6					
3002	2319	0001	3005R	A		232701	E000.8					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
23 JULY 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
3003	0001	0050	3005R	A		002047	E167.4	3004	2319	0118R	3005	A
3004						020803	E140.6	3005	0248	0433R	3005	B
3005	0336	0425	3005R	B		035520	E113.7	3006	0442	0619R	3006	B
3006	0523	0612	3006R	B		054236	E086.9	3007	0625	0804A	3007	B
3007	0710	0759	3007A	B		072953	E060.1	3008	0808	0948A	3008	B
3008	0858	0947	3008A	B		091709	E033.3	3009	0954	1137A	3009	B
3009	1045	1134	3009A	B		110426	E006.5	3010	1143	1322A	3010	B
3010	1232	1321	3010A	B		125142	W020.4	3011	1327	1504A	3011	B
3011	1419	1505	3011A	B		143859	W047.2	3012	1510	1648A	3012	B
3012	1607	1647	3012A	B		162615	W074.0	3013	1653	1829A	3013	B
3013	1754	1829	3013A	B		181332	W100.8	3014	1834	2018A	3014	B
3013	1834	1843	3014A	B				3015	2023	2140	3015A	B
3014	1941	2017	3014A	B		200048	W127.6	3016	2207	0009	3019R	A
3014	2023	2030	3015A	B								
3015	2129	2206	3015A	B		214805	W154.5					
3015	2207	2217	3019R	A								
3016*	2316	0005	3019R	A		233522	E178.7					

* NO 6.7 DATA

NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**			
3003	0050	0117	3005R	A		011418	W026.0	0246	0433	3005R	B
3004	0247	0336	3005R	B		030134	W052.9	0438	0619	3006R	B
3005	0425	0432	3005R	B		044851	W079.7	0625	0804	3007A	B
3005	0438	0523	3006R	B				0809	0948	3008A	B
3006	0612	0619	3006R	B		063607	W106.5	0953	1133	3009A	B
3006	0625	0710	3007A	B				1142	1322	3010A	B
3007	0808	0858	3008A	B		082324	W133.3	1327	1504	3011A	B
3008	0953	1045	3009A	B		101040	W160.1	1510	1648	3012A	B
3009	1142	1232	3010A	B		115757	E173.1	1653	1830	3013A	B
3010	1327	1419	3011A	B		134513	E146.3	1834	2018	3014A	B
3011	1510	1607	3012A	B		153230	E119.5	2023	2206	3015A	B
3012	1656	1754	3013A	B		171947	E092.6	2207	0009	3019R	A
3013	1843	1941	3014A	B		190703	E065.8				
3014	2030	2129	3015A	B		205420	E039.0				
3015	2217	2316	3019R	A		224136	E012.2				
3016						002853	W014.7				

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
24 JULY 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
3017						012238	E151.9	3018	0154	0349	3018R	B
3018	0250	0339	3018R	B		030955	E125.1	3019	0356	0535	3019R	B
3019	0438	0527	3019R	B		045711	E098.3	3020	0541	0721	3020R	B
3020	0625	0714	3020R	B		064428	E071.4	3021	0727	0903	3021A	B
3021	0812	0901	3021A	B		083144	E044.6	3022	0908	1052	3022A	B
3022	0959	1048	3022A	B		101901	E017.8	3023	1057	1234	3023A	B
3023	1147	1236	3023A	B		120617	W009.0	3024	1243	1420	3024A	B
3024	1334	1419	3024A	B		135334	W035.8	3025	1425	1554	3025A	B
3025	1521	1604	3025A	B		154050	W062.7	3026	1610	1745	3026A	B
3026	1708	1744	3026A	B		172807	W089.5	3027	1750	1930	3027A	B
3026	1750	1757	3027A	B				3028	1935	2118	3028A	B
3027	1856	1930	3027A	B		191523	W116.3	3029	2122	2307	3029A	B
3027	1935	1945	3028A	B								
3028	2043	2117	3028A	B		210240	W143.1					
3028	2122	2132	3029A	B								
3029	2230	2306	3029A	B		224956	W170.0					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
3017	0155	0250	3018R	B		021609	W041.5	0154	0349	3018R	B	
3018	0339	0349	3018R	B		040326	W068.3	0355	0535	3019R	B	
3018	0356	0438	3019R	B				0541	0721	3020R	B	
3019	0527	0535	3019R	B		055042	W095.1	0727	0904	3021A	B	
3019	0541	0625	3020R	B				0908	1052	3022A	B	
3020	0714	0721	3020R	B		073759	W121.9	1057	1234	3023A	B	
3020	0727	0812	3021A	B				1243	1420	3024A	B	
3021	0908	0959	3022A	B		092515	W148.8	1425	1605	3025A	B	
3022	1057	1147	3023A	B		111232	W175.6	1610	1745	3026A	B	
3023	1244	1334	3024A	B		125948	E157.6	1750	1930	3027A	B	
3024	1425	1521	3025A	B		144705	E130.8	1935	2118	3028A	B	
3025	1610	1708	3026A	B		163421	E104.0	2122	2307	3029A	B	
3026	1757	1856	3027A	B		182138	E077.1	2335	0135	3032R	A	
3027	1945	2043	3028A	B		200854	E050.3					
3028	2132	2230	3029A	B		215611	E023.5					
3029	2335	0018	3032R	A		234327	W003.3					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
25 JULY 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
3030	0018	0106	3032R	A		003713	E163.3	3030	2335	0048	3030R	A
3031						022429	E136.5	3032	0303	0448	3032R	B
3032	0352	0441	3032R	B		041146	E109.6	3033	0454	0638	3033R	B
3033	0539	0628	3033R	B		055902	E082.8	3034	0644	0839	3034A	B
3034	0727	0816	3034A	B		074619	E056.0	3035	0823	1005	3035A	B
3035	0914	1003	3035A	B		093335	E029.2	3036	1011	1153	3036A	B
3036	1101	1150	3036A	B		112052	E002.3	3037	1158	1339	3037A	B
3037	1248	1337	3037A	B		130808	W024.5	3038	1344	1520	3038A	B
3038	1436	1519	3038A	B		145525	W051.3	3039	1524	1705	3039A	B
3039	1623	1705	3039A	B		164241	W078.1	3040	1710	1845	3040A	B
3040	1810	1844	3040A	B		182958	W105.0	3041	1851	2031	3041A	B
3040	1850	1859	3041A	B				3042	2037	2220	3042A	B
3041	1958	2032	3041A	B		201714	W131.8	3043	2250	0048	3043R	A
3041	2037	2046	3042A	B								
3042	2145	2219	3042A	B		220431	W158.6					
3043	2332	0021	3046R	A		235148	E174.6					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
3030	0106	0134	3032R	A		013044	W030.1	0301	0449	3032R	B	
3031	0302	0352	3032R	B		031801	W057.0	0454	0639	3033R	B	
3032	0441	0448	3032R	B		050517	W083.8	0644	0819	3034A	B	
3032	0454	0539	3033R	B				0823	1005	3035A	B	
3033	0628	0638	3033R	B		065234	W110.6	1010	1153	3036A	B	
3033	0644	0727	3034A	B				1158	1340	3037A	B	
3034	0823	0914	3035A	B		083950	W137.4	1345	1520	3038A	B	
3035	1011	1101	3036A	B		102707	W164.2	1524	1706	3039A	B	
3036	1158	1248	3037A	B		121423	E168.9	1710	1845	3040A	B	
3037	1345	1436	3038A	B		140140	E142.1	1850	2032	3041A	B	
3038	1525	1623	3039A	B		154856	E115.3	2037	2220	3042A	B	
3039	1712	1810	3040A	B		173613	E088.5	2250	0049	3046R	A	
3040	1859	1958	3041A	B		192329	E061.7					
3041	2046	2145	3042A	B		211046	E034.9					
3042	2250	2332	3046R	A		225802	E008.0					
3043	0021	0049	3046R	A		004519	W018.8					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
26 JULY 1973

THIR							ASC. AND DESC. NODE		ESMR				
	11.5 + 6.7		INT ORBIT	H D R	THIR GRID CORR		TIME	LONG				INT ORBIT	H D R
DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S	LALO		HRMNSS	DEG	DATA ORBIT	ON HRMN	OFF HRMN	+ STDN	S
	DAYTIME THIR						ASC. NODE						
3044							013904	E147.8	3045	0214	0406	3045R	B
3045	0307	0356	3045R	B			032621	E121.0	3046	0412	0552	3046R	B
3046	0454	0543	3046R	B			051337	E094.2	3047	0557	0733	3047A	B
3047	0641	0730	3047A	B			070054	E067.3	3048	0738	0923	3048A	B
3048	0828	0917	3048A	B			084810	E040.5	3049	0928	1110	3049A	B
3049	1016	1105	3049A	B			103527	E013.7	3050	1115	1252	3050A	B
3050	1203	1252	3050A	B			122243	W013.1	3051	1259	1436	3051A	B
3051	1350	1436	3051A	B			141000	W039.9	3052	1442	1622	3052A	B
3052	1538	1621	3052A	B			155716	W066.8	3054	1739	1938	3055A	B
3053	1740	1814	3055A	B			174433	W093.6	3055	1938	2133	3055A	A
3054	1912	1938	3055A	B			193149	W120.4	3056	2204	0004	3061A	A
3054	1939	2001	3055A	A									
3055	2059	2132	3055A	A			211906	W147.2					
3056	2247	2336	3061A	A			230622	W174.0					
	NIGHTTIME THIR						DESC. NODE		NEMS - SCR - ITPR				
3044	0215	0307	3045R	B			023235	W045.6	0214	0406	3045R	B	
3045	0356	0406	3045R	B			041952	W072.4	0412	0552	3046R	B	
3045	0412	0454	3046R	B					0557	0733	3047A	B	
3046	0543	0551	3046R	B			060708	W099.2	0738	0923	3048A	B	
3046	0557	0641	3047A	B					0928	1110	3049A	B	
3047	0738	0828	3048A	B			075425	W126.1	1115	1253	3050A	B	
3048	0917	0922	3048A	B			094141	W152.9	1259	1437	3051A	B	
3048	0928	1016	3049A	B					1442	1622	3052A	B	
3049	1115	1203	3050A	B			112858	W179.7	1739	1939	3055A	B	
3050	1259	1350	3051A	B			131614	E153.5	1938	2133	3055A	A	
3051	1442	1538	3052A	B			150331	E126.7	2205	0005	3061A	A	
3052							165048	E099.9					
3053	1814	1912	3055A	B			183804	E073.0					
3054	2001	2059	3055A	A			202521	E046.2					
3055	2205	2247	3061A	A			221237	E019.4					
3056	2336	0003	3061A	A			235954	W007.4					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
27 JULY 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
3057						005339	E159.1	3060	0138	0337	3060R	B
3058	0221	0310	3060R	B		024055	E132.3	3061	0659	0833	3061A	B
3059						042812	E105.5	3062	0838	1023	3062A	B
3060						061528	E078.7	3063	1029	1207	3063A	B
3061	0743	0832	3061A	B		080245	E051.9	3064	1214	1352	3064A	B
3062	0930	1019	3062A	B		095001	E025.0	3065	1357	1535	3065A	B
3063	1118	1206	3063A	B		113718	W001.8	3066	1540	1721	3066A	B
3064	1305	1352	3064A	B		132434	W028.6	3068	1859	2054	3069A	B
3065	1452	1535	3065A	B		151151	W055.4	3069	2041	2236	3069A	A
3066	1639	1720	3066A	B		165907	W082.2					
3067	1859	1916	3069A	B		184624	W109.1					
3068	2014	2040	3069A	B		203340	W135.9					
3068	2041	2103	3069A	A								
3069	2201	2235	3069A	A		222057	W162.7					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
3057	0138	0221	3060R	B		014710	W034.2	0138	0337	3060R	B	
3058	0310	0323	3060R	B		033427	W061.1	0659	0833	3061A	B	
3059						052143	W087.9	0838	1024	3062A	B	
3060	0659	0743	3061A	B		070900	W114.7	1029	1208	3063A	B	
3061	0838	0930	3062A	B		085616	W141.5	1214	1352	3064A	B	
3062	1029	1118	3063A	B		104333	W168.3	1357	1536	3065A	B	
3063	1214	1305	3064A	B		123049	E164.8	1540	1721	3066A	B	
3064	1357	1452	3065A	B		141806	E138.0	1858	2040	3069A	B	
3065	1541	1639	3066A	B		160522	E111.2	2041	2236	3069A	A	
3066						175239	E084.4	2306	0106	3075A	A	
3067	1916	2014	3069A	B		193955	E057.6					
3068	2103	2201	3069A	A		212712	E030.7					
3069	2306	2348	3075A	A		231428	E003.9					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
28 JULY 1973

THIR							ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
3070	2348	0037	3075A	A		000813	E170.5	3070	2306	0106	3075A	A
3071						015530	E143.7	3072	0235	0420	3072R	B
3072	0323	0412	3072R	B		034247	E116.9	3073	0426	0609	3073R	B
3073	0510	0559	3073R	B		053003	E090.0	3074	0614	0748	3074A	B
3074	0657	0746	3074A	B		071720	E063.2	3075	0753	0934	3075A	B
3075	0845	0933	3075A	B		090436	E036.4	3076	0939	1125	3076A	B
3076	1032	1121	3076A	B		105153	E009.6	3077	1130	1310	3077A	B
3077	1219	1308	3077A	B		123909	W017.3	3078	1316	1453	3078A	B
3078	1407	1453	3078A	B		142626	W044.1	3079	1458	1637	3079A	B
3079	1554	1636	3079A	B		161342	W070.9	3080	1641	1828	3081A	B
3080	1741	1828	3081A	B		180059	W097.7	3081	1817	2002	3081A	A
3080	1817	1830	3081A	A				3082	2012	2150	3082A	B
3081	1928	2002	3081A	A		194815	W124.5	3083	2221	0017	3086R	A
3081	2012	2017	3082A	B								
3082	2116	2150	3082A	B		213532	W151.3					
3083	2303	2352	3086R	A		232248	W178.1					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
3070	0037	0106	3075A	A		010145	W022.9		0235	0421	3072R	B
3071	0236	0323	3072R	B		024902	W049.7		0426	0609	3073R	B
3072	0412	0419	3072R	B		043618	W076.5		0614	0749	3074A	B
3072	0426	0510	3073R	B					0753	0934	3075A	B
3073	0559	0608	3073R	B		062335	W103.4		0939	1125	3076A	B
3073	0614	0657	3074A	B					1130	1310	3077A	B
3074	0753	0845	3075A	B		081051	W130.2		1316	1454	3078A	B
3075	0939	1032	3076A	B		095808	W157.0		1458	1637	3079A	B
3076	1130	1219	3077A	B		114524	E176.2		1641	1829	3081A	B
3077	1316	1407	3078A	B		133241	E149.4		1817	2003	3081A	A
3078	1459	1554	3079A	B		151957	E122.6		2012	2151	3082A	B
3079	1643	1741	3081A	B		170714	E095.8		2221	0018	3086R	A
3080	1830	1928	3081A	A		185430	E068.9					
3081	2017	2116	3082A	B		204147	E042.1					
3082	2221	2303	3086R	A		222903	E015.3					
3083	2352	0020	3086R	A		001620	W011.5					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
29 JULY 1973

THIR						ASC. AND DESC. NODE		ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
3084						011005	E155.0	3085	0156	0354	3086R	B
3085	0237	0326	3086R	B		025721	E128.2	3087	0528	0704	3088A	B
3086						044438	E101.4	3088	0705	0853	3088A	A
3087	0612	0701	3088A	B		063154	E074.6	3089	0854	1035	3089A	B
3088	0759	0848	3088A	A		081911	E047.8	3090	1044	1223	3090A	B
3089	0946	1035	3089A	B		100627	E020.9	3091	1230	1409	3091A	B
3090	1134	1223	3090A	B		115344	W005.9	3092	1414	1551	3092A	B
3091	1321	1409	3091A	B		134100	W032.7	3093	1556	1733	3093A	B
3092	1508	1551	3092A	B		152817	W059.5	3094	1738	1917	3094A	B
3093	1656	1732	3093A	B		171533	W086.3	3095	1923	2101	3095A	B
3093	1737	1744	3094A	B				3096	2110	2252	3096A	B
3094	1843	1916	3094A	B		190250	W113.2					
3094	1922	1932	3095A	B								
3095	2030	2104	3095A	B		205006	W140.0					
3095	2110	2119	3096A	B								
3096	2217	2252	3096A	B		223723	W166.8					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
3084	0155	0237	3086R	B		020336	W038.3		0155	0354	3086R	B
3085	0326	0354	3086R	B		035053	W065.2		0527	0705	3088A	B
3086	0527	0612	3088A	B		053809	W092.0		0705	0854	3088A	A
3087	0705	0759	3088A	A		072526	W118.8		0854	1036	3089A	B
3088	0848	0853	3088A	A		091242	W145.6		1041	1224	3090A	B
3088	0854	0946	3089A	B					1230	1410	3091A	B
3089	1041	1134	3090A	B		105959	W172.5		1414	1551	3092A	B
3090	1230	1321	3091A	B		124716	E160.7		1556	1733	3093A	B
3091	1414	1508	3092A	B		143432	E133.9		1737	1917	3094A	B
3092	1557	1656	3093A	B		162149	E107.1		1922	2102	3095A	B
3093	1744	1843	3094A	B		180905	E080.3		2110	2253	3096A	B
3094	1932	2030	3095A	B		195622	E053.5		2323	0122	3099R	A
3095	2119	2217	3096A	B		214338	E026.6					
3096	2323	0005	3099R	A		233055	W000.2					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
30 JULY 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
DAYTIME THIR						**ASC. NODE**						
3097	0005	0054	3099R	A		002440	E166.4	3097	2323	0122	3099R	A
3098						021156	E139.6	3099	0250	0436	3099R	B
3099	0339	0428	3099R	B		035912	E112.7	3100	0442	0628	3101A	B
3100	0526	0615	3101A	B		054629	E085.9	3101	0624	0807	3102A	A
3101	0714	0803	3102A	A		073346	E059.1	3102	0809	0949	3102A	B
3102	0901	0948	3102A	B	1N	092102	E032.3	3103	0955	1137	3103A	B
3103	1048	1137	3103A	B		110819	E005.5	3104	1145	1326	3104A	B
3104	1236	1324	3104A	B		125535	W021.4	3105	1331	1510	3105A	B
3105	1423	1509	3105A	B		144252	W048.2	3106	1515	1654	3106A	B
3106	1610	1653	3106A	B		163008	W075.0	3107	1659	1832	3107A	B
3107	1757	1832	3107A	B		181725	W101.8	3108	1839	2018	3108A	B
3107	1838	1846	3108A	B				3109	2024	2207	3109A	B
3108	1945	2017	3108A	B		200441	W128.6	3110	2237	0038	3115A	A
3108	2023	2034	3109A	B								
3109	2132	2207	3109A	B		215158	W115.4					
3110	2319	0008	3115A	A		233914	E177.7					
NIGHTTIME THIR						**DESC. NODE**		**NEMS - SCR - ITPR**				
3097	0054	0122	3099R	A		011811	W027.0	0250	0437	3099R	B	
3098	0251	0339	3099R	B		030528	W053.8	0442	0629	3101A	B	
3099	0428	0436	3099R	B		045244	W080.6	0624	0808	3102A	B	
3099	0442	0526	3101A	B				0809	0950	3102A	A	
3100	0615	0628	3101A	B		064001	W107.5	0954	1137	3103A	B	
3100	0624	0714	3102A	A				1145	1313	3104A	B	
3101	0810	0901	3102A	B	1S	082717	W134.3	1331	1510	3105A	B	
3102	0954	1048	3103A	B		101434	W161.1	1515	1654	3106A	B	
3103	1146	1236	3104A	B		120150	E172.1	1659	1833	3107A	B	
3104	1331	1423	3105A	B		134907	E145.3	1838	2018	3108A	B	
3105	1515	1610	3106A	B		153624	E118.4	2023	2207	3109A	B	
3106	1659	1757	3107A	B		172340	E091.6	2237	0038	3115A	A	
3107	1846	1945	3108A	B		191056	E064.8					
3108	2034	2132	3109A	B		205813	E038.0					
3109	2237	2319	3115A	A		224529	E011.2					
3110	0008	0037	3115A	A		003246	W015.7					

TABLE 2-2
DATA AVAILABILITY ON-OFF TIMES
31 JULY 1973

THIR								ESMR				
DATA ORBIT	11.5 + 6.7 ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S	THIR GRID CORR LALO	ASC. AND DESC. NODE TIME HRMNSS	LONG DEG	DATA ORBIT	ON HRMN	OFF HRMN	INT ORBIT + STDN	H D R S
	DAYTIME THIR					ASC. NODE						
3111						012631	E150.9	3112	0157	0354	3112R	B
3112	0254	0343	3112R	B		031347	E124.1	3114	0400	0557	3114A	B
3113	0441	0530	3114A	B		050104	E097.3	3115	0726	0905	3115A	B
3114						064820	E070.5	3116	0910	1052	3116A	B
3115	0816	0904	3115A	B		083537	E043.7	3117	1057	1241	3117A	B
3116	1003	1052	3116A	B		102253	E016.8	3118	1247	1426	3118A	B
3117	1150	1239	3117A	B		121010	W010.0	3119	1432	1606	3119A	B
3118	1337	1426	3118A	B		135726	W036.8	3120	1611	1749	3120A	B
3119	1525	1605	3119A	B		154443	W063.6	3121	1754	1936	3121A	B
3120	1712	1748	3120A	B		173159	W090.4	3122	1943	2121	3122A	B
3120	1754	1801	3121A	B				3123	2132	2308	3123A	B
3121	1859	1936	3121A	B		191916	W117.3					
3121	1943	1948	3122A	B								
3122	2046	2120	3122A	B		210632	W144.1					
3123	2234	2308	3123A	B		225349	W170.9					
	NIGHTTIME THIR					DESC. NODE			NEMS - SCR - ITPR			
3111	0157	0254	3112R	B		022003	W042.5		0157	0354	3112R	B
3112	0343	0354	3112R	B		040719	W069.3		0400	0558	3114A	B
3112	0400	0441	3114A	B					0726	0905	3115A	B
3113	0530	0557	3114A	B		055436	W096.1		0910	1053	3116B	A
3114	0726	0816	3115A	B		074152	W122.9		1057	1242	3117B	A
3115	0910	1003	3116A	B		092909	W149.8		1247	1427	3118B	A
3116	1057	1150	3117A	B		111625	W176.6		1431	1606	3119B	A
3117	1247	1337	3118A	B		130342	E156.6		1611	1749	3120B	A
3118	1432	1525	3119A	B		145058	E129.8		1754	1937	3121B	A
3119	1613	1712	3120A	B		163815	E103.0		1943	2121	3122B	A
3120	1801	1859	3121A	B		182531	E076.2		2131	2309	3123B	A
3121	1948	2046	3122A	B		201248	E049.4		2339	0136	3128A	A
3122	2135	2234	3123A	B		220004	E022.5					
3123	2339	0021	3128A	A		234721	W004.3					

SECTION 3

ELECTRICALLY SCANNING MICROWAVE RADIOMETER DISPLAYS

One ESMR display per day has been selected for presentation in this section. All ESMR coverage times are listed in the Data Availability On-Off Times (Table 2-2). Each display contains the following items:

Nimbus 5 ESMR

This identifies the satellite (Nimbus 5) and the experiment (ESMR).

Date

This identifies the Greenwich day, month, and year the data is recorded.

Data Orbit

This data orbit number identifies only the last data orbit on each display. Usually parts of two data orbits are on the same display, since all data acquired during each satellite interrogation is presented on one 4 × 5-inch negative. In general, nighttime data is on the left and daytime data is on the right.

Program

No Program number is identified on these displays. Its intended use was to identify the appropriate table which would list the temperature interval for each gray level in the gray scale. The temperature programs used since launch are listed in Table 3-1.

Gray Scale

A single 11-step gray scale serves to define ESMR brightness temperatures in all three swaths, by the assignment of a different brightness temperature range to each step for each swath. Table 3-1 defines the gray scale table used on all images since launch.

Image Swaths (1, 2, 3)

A set of three swaths, labeled 1, 2, and 3, separates the same recorded data into three temperature intervals (defined in Table 3-1). The right set of three swaths is a continuation of the left set and is offset because of the limitations of the 4 × 5-inch film format. The three swath presentation is used because it shortens the temperature ranges spanned by

Table 3-1

ESMR Gray Scale Steps Versus Brightness Temperature
for Each of the Three ESMR Swaths in
the ESMR Pictorial Displays
(Temperatures in °K)

		Table 1 Orbit 104 through 502			Table 2 Orbit 503 through 3123		
Swath		1	2	3	1	2	3
(black)	1	>200	>262	>280	>210	>266	>290
Gray Scale Number	2	190-200	256-262	277-280	202-210	258-266	286-290
	3	180-190	250-256	274-277	194-202	250-258	282-286
	4	170-180	240-250	271-274	186-194	242-250	278-282
	5	160-170	230-240	268-271	178-186	234-242	274-278
	6	150-160	220-230	265-268	170-178	226-234	270-274
	7	140-150	210-220	262-265	162-170	218-226	266-270
	8	130-140	200-210	259-262	154-162	210-218	262-266
	9	120-130	190-200	256-259	146-154	202-210	258-262
	10	110-120	180-190	253-256	138-146	194-202	254-258
(white)	11	<110	<180	<253	<138	<194	<254

each step of the gray scale, and, therefore, permits discrimination of various meteorological and terrestrial phenomena.

Significant in swath 1 are the areas of atmospheric moisture and rainfall over oceans. Swath 2 brightness temperature range discriminates between new and multi-year ice and, over oceans, shows only rainfall areas. The high brightness temperatures of swath 3 outline some land areas of high soil moisture content or snow cover, but oceans lose almost all their temperature contrasts. The swath 3 information was lost because of an instrument malfunction between orbit 1062 (28 February) and orbit 2250 (27 May), and for short intervals after orbit 3015 (23 July).

Time Code Index

The Time Code Index, in hours and minutes (GMT), is adjacent to the gray scale. The top number in each set is for the left group of three

swaths; the bottom number in each set is for the right group of three swaths. Time bars are spaced at five-minute intervals. The same time bars are used for the left and right swaths. The top or bottom time code index determines the time for each time bar.

Grids

Two grids, labeled GRID L and GRID R, identify the geographic coordinates for the imagery of the left (L) and the right (R) sets of swaths, respectively. Latitude lines are spaced at 10-degree intervals. Longitude lines are spaced at 10-degree intervals to 60 degrees north and south of the equator, and at 20-degree intervals from 60 to 80 degrees north and south. The equator (EQ), North Pole (NP), and South Pole (SP) are labeled, as well as longitude values at the equator and at 30 and 60 degrees north and south of the equator.

Swath Display Program

The antenna gain function is different at each beam position. Thus, to present a uniform surface temperature as the same shade of gray across a scan track requires that the output voltage at each antenna position be adjusted for its beam position and output voltage value. If the corrections are not precise, vertical bands will be evident in the ESMR pictorial displays.

Three different sets of calibration constants (Display Format Programs) were used during the first two months of operation to eliminate these vertical bands. Two additional programs have been used since the instrument malfunction of 28 February 1973. Volume 1 of this catalog series illustrates the vertical banding produced by the first three programs, while the images in this section illustrate the banding produced by the last two. After 27 May, Program 5 was used for image displays whenever the instrument was operating normally. Table 3-2 shows the Display Format Programs used during this catalog period. Two gray scales versus brightness temperature tables have been used as shown in Table 3-2, with values for each shown in Table 3-1.

The brightness temperature accuracy varied with each Display Format Program. With display Program 1, which uses prelaunch calibration constants, the digital brightness temperature values have about ±20° K accuracy. With a change to postlaunch calibration constants, Programs 2 and 4 produce about ±2° to 5° K temperature value accuracies. Of course, with Programs 2 and 4, the displayed temperature values are accurate only within the limits of the temperature range of each step of

the gray scales as defined in Table 3-1. Display Programs 5 and 6, used after the instrument malfunction of 28 February 1973, are considered to produce ±10° K temperature accuracies on the image displays.

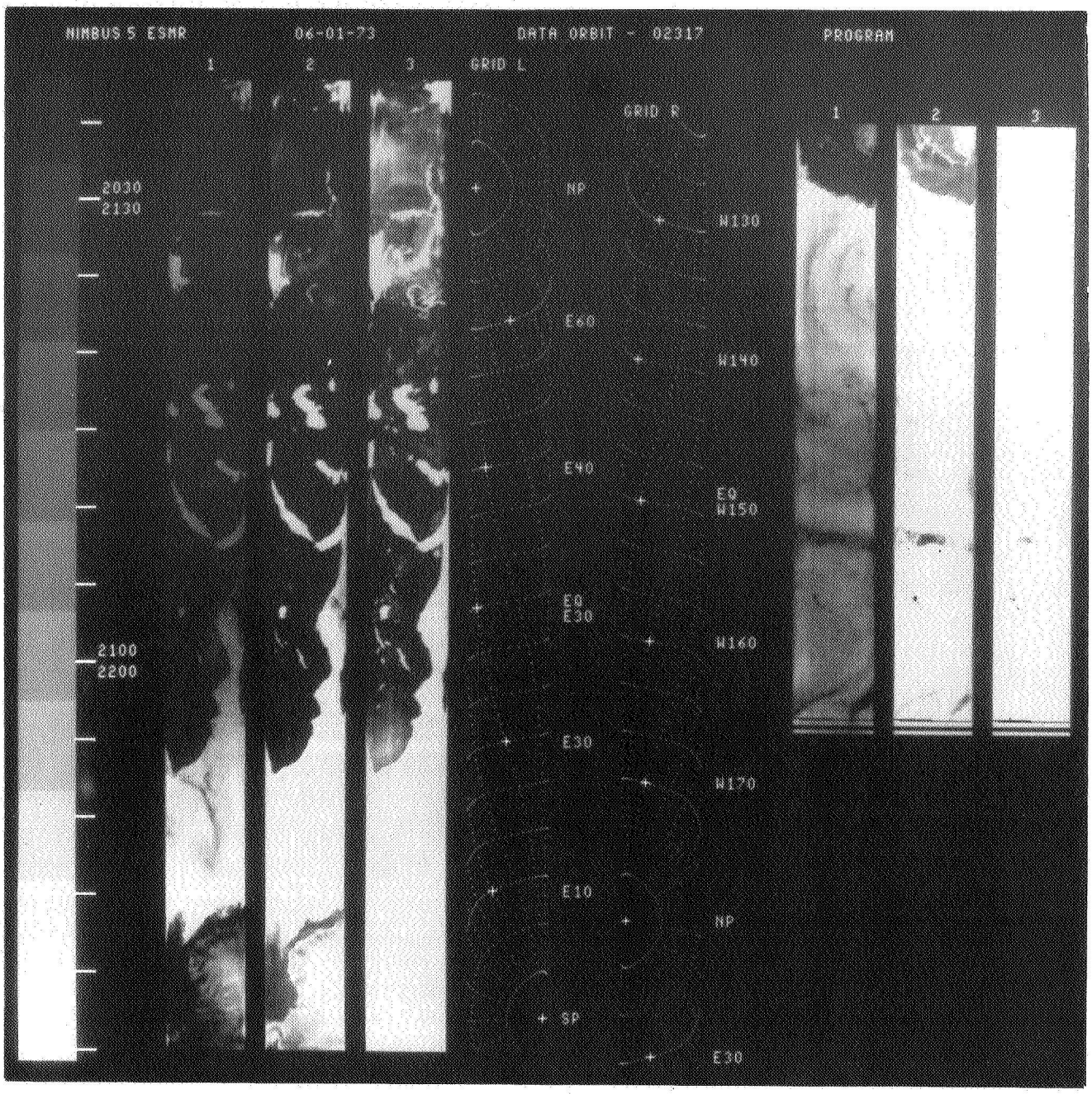
A description of the ESMR experiment may be found in The Nimbus 5 User's Guide, Section 4, and instructions for ordering the data, both pictorial and digital, are in Section 1.7 of that Guide.

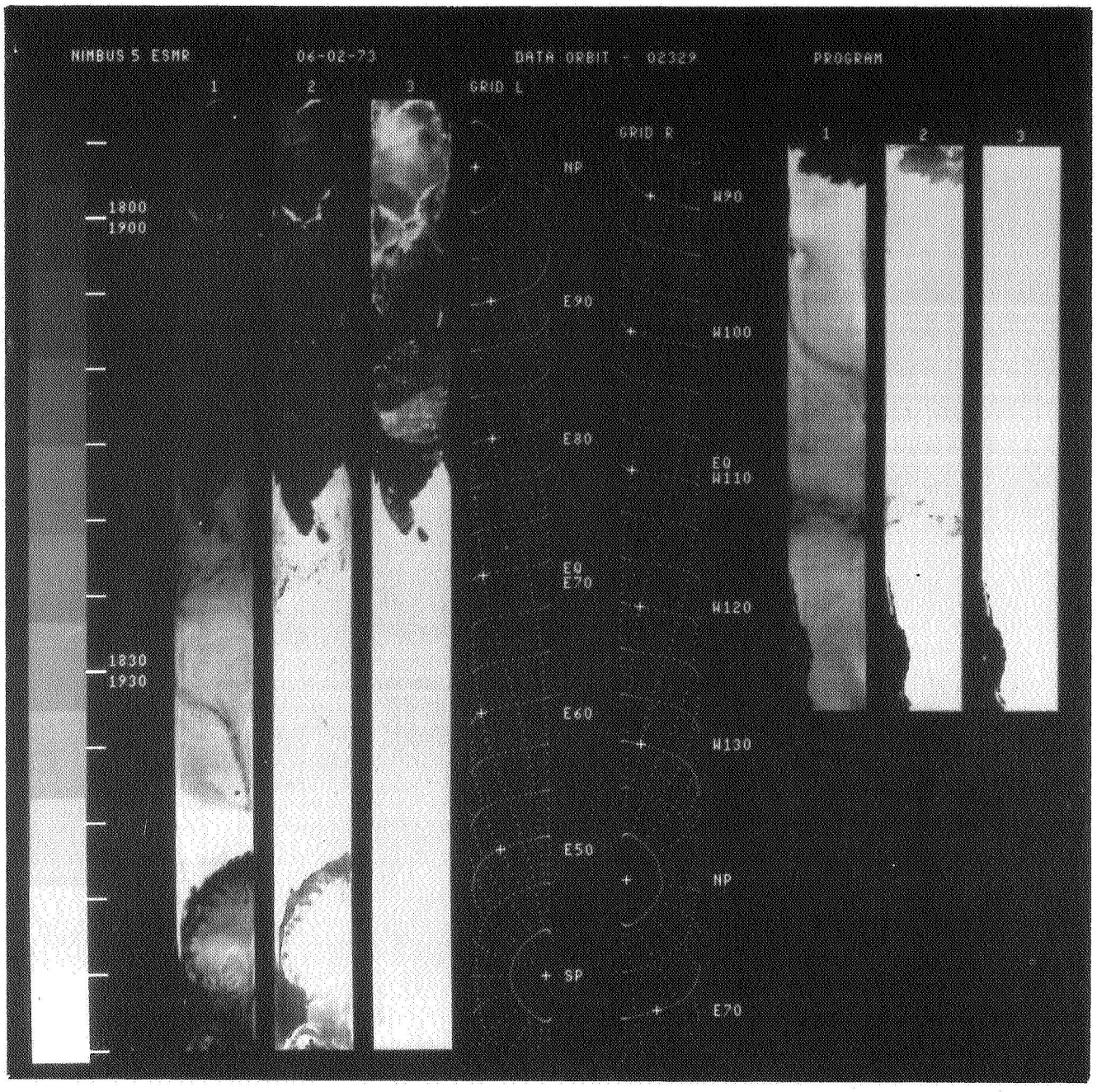
Table 3-2

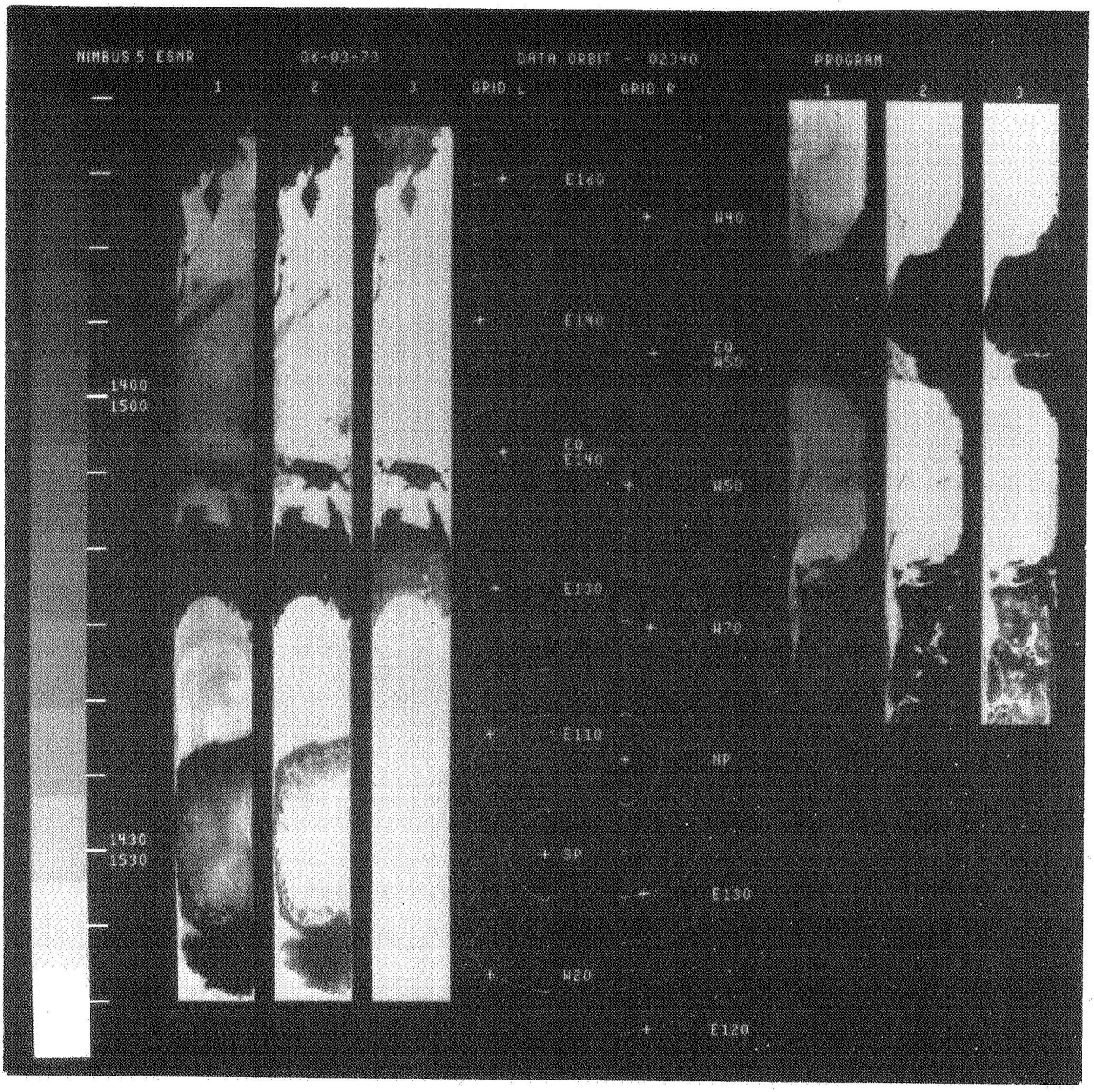
ESMR Display Format and Gray Scale
Brightness Temperature Programs for June and July 1973

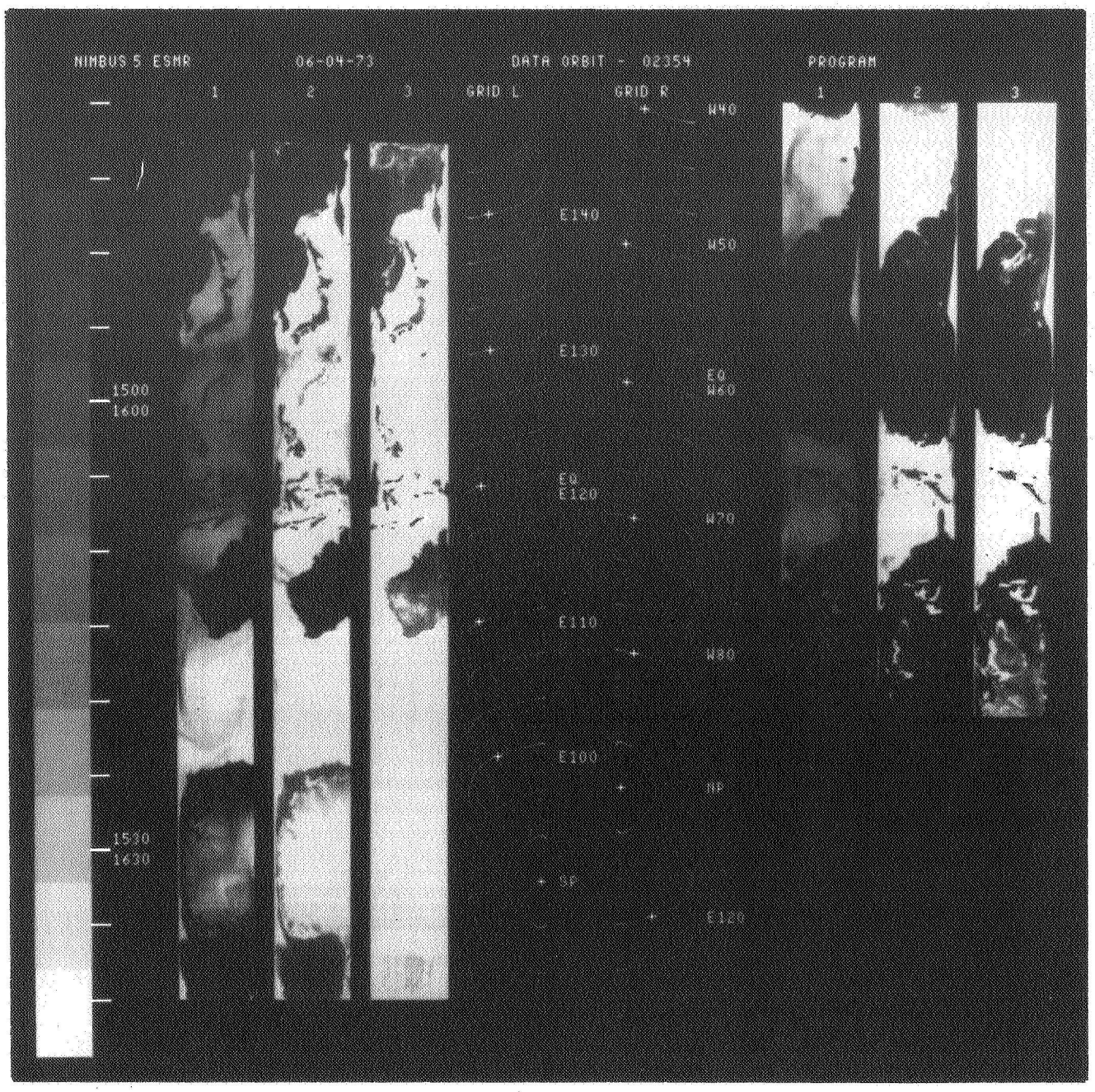
Date	Orbit	Display Format Program	Gray Scale Brightness Temperature Table
27 May - 23 July	2251 - 3015	5	2
23 July - 24 July	3016 - 3019	6	2
24 July	3020 - 3025	5	2
24 July	3026 - 3028	6	2
24 July - 25 July	3028 - 3030	5	2
25 July	3031 - 3040	6	2
25 July	3041 - 3042	5	2
25 July	3043	6	2
26 July	3044 - 3047	5	2
26 July	3048 - 3049	6	2
26 July	3050 - 3052	5	2
26 July - 28 July	3053 - 3083	6	2
29 July - 31 July	3084 - 3119	5	2
31 July	3120 - 3123	6	2

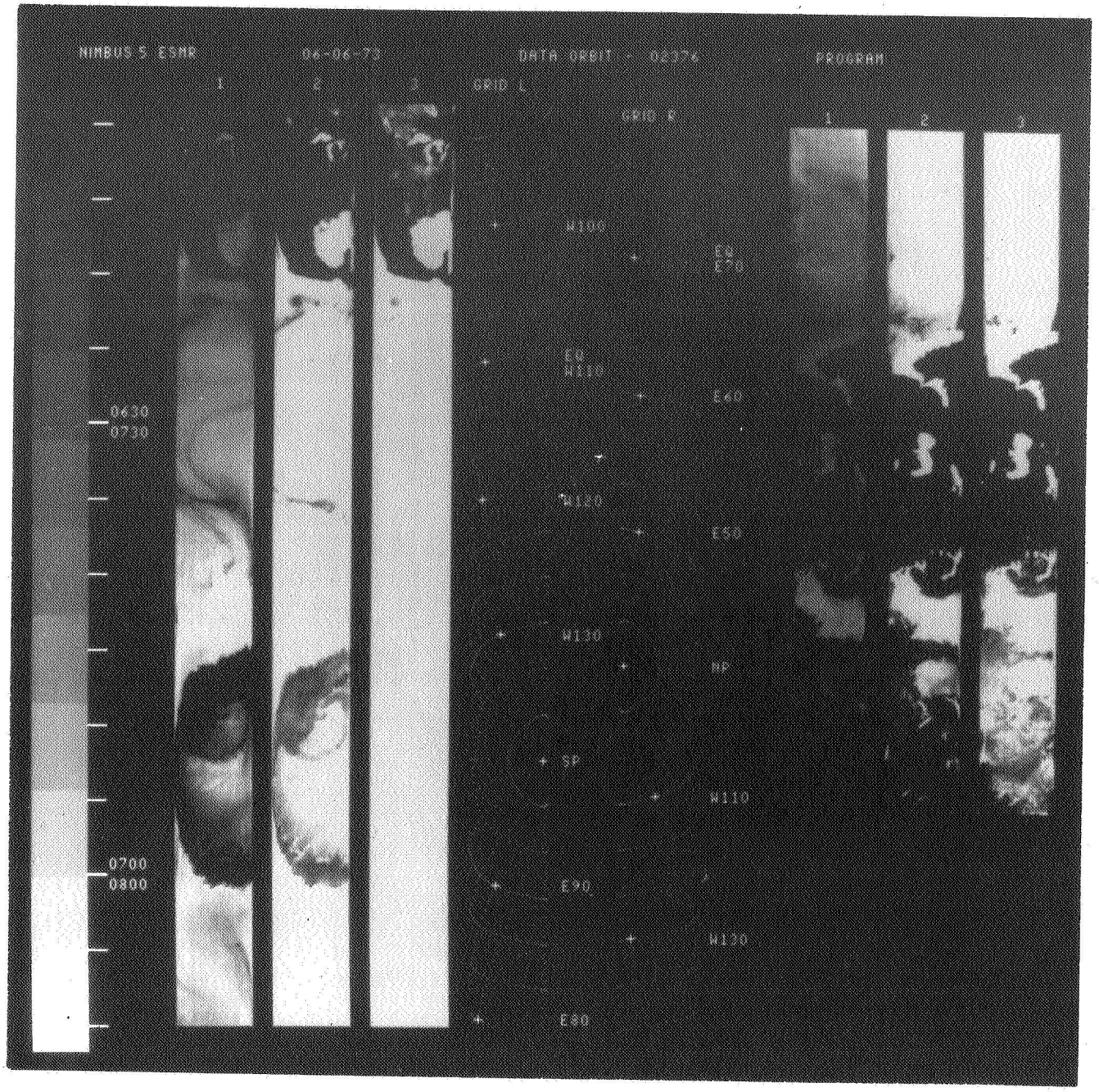
After 27 May, Display Format Program 5 was used for image displays whenever the instrument was operating normally (data in all three swaths), and Program 6 was used when the instrument was in the reduced response mode (data only in swaths one and two).

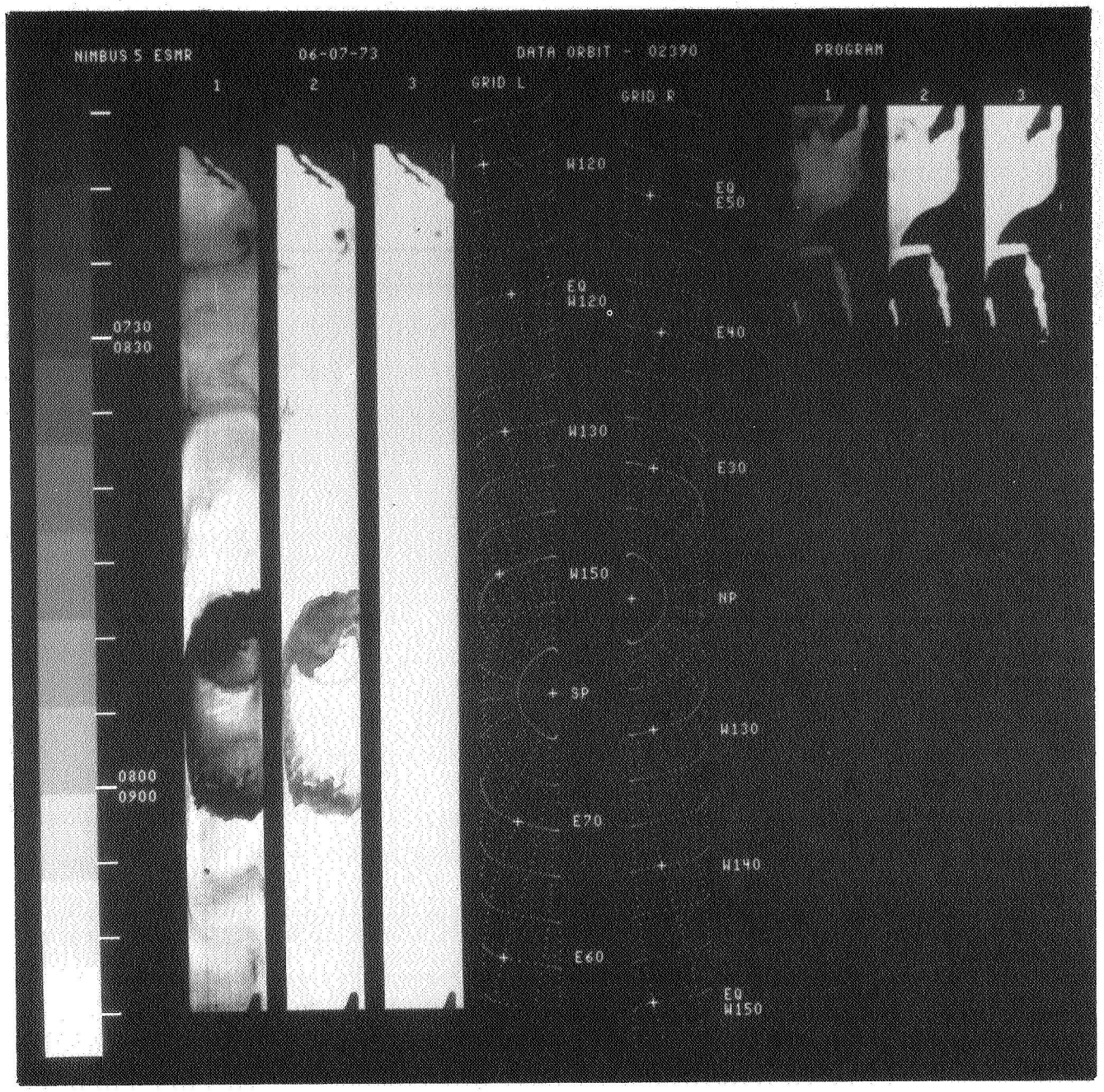

NIMBUS 5 ESMR
04-01-73
DATA ORBIT - 02317
PROGRAM
1
2
3
GRID L
GRID R
2030
2130
2100
2200
NP
W130
E60
W140
E40
E0
W150
E0
E30
W160
E30
W170
E10
NP
SP
E30

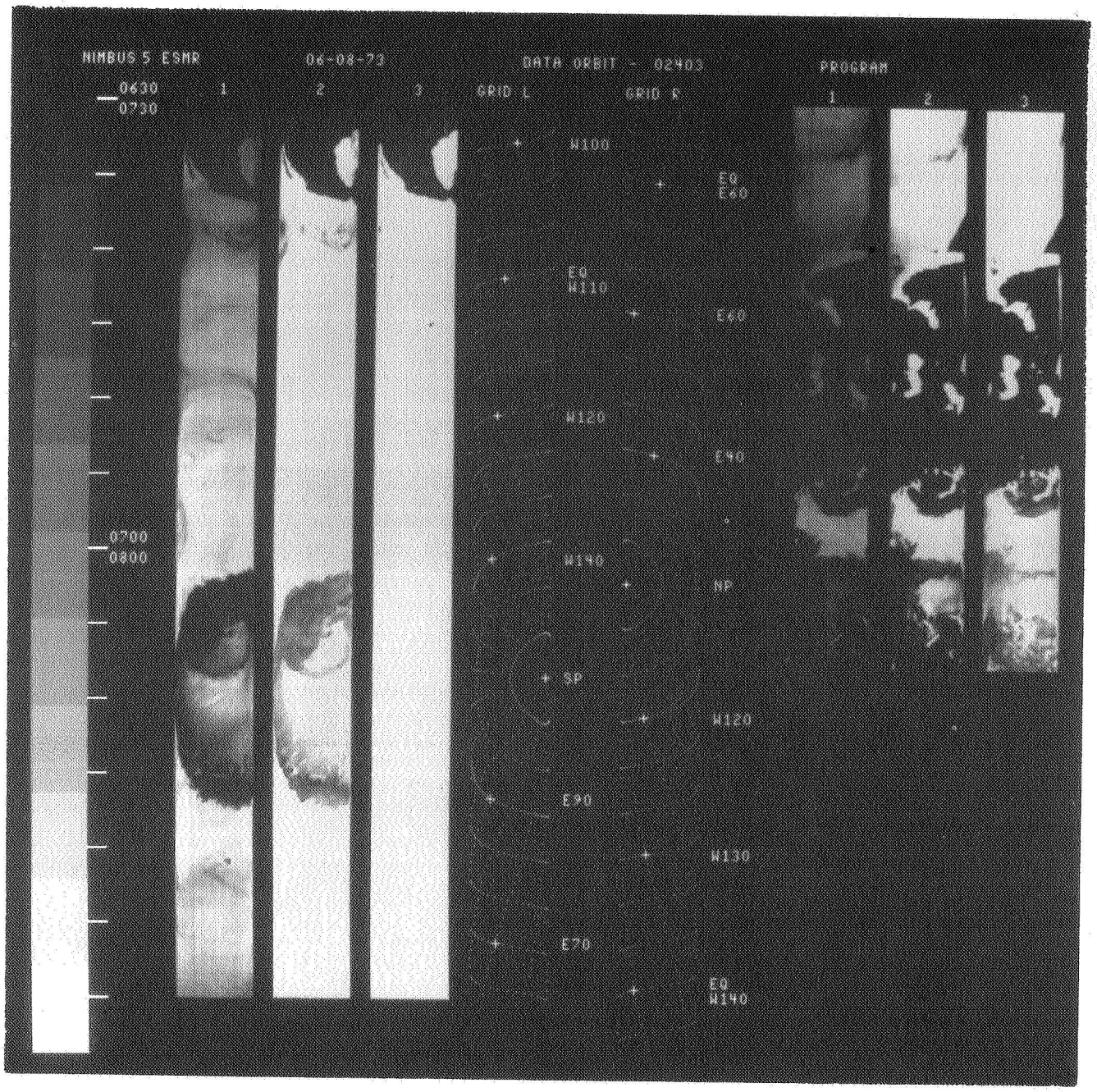

NIMBUS 5 ESMR
06-02-73
DATA ORBIT - 02329
PROGRAM
1
2
3
GRID L
GRID R
1800
1900
1830
1930
NP
W90
E90
W100
E80
E0
W110
E0
E70
W120
E60
W130
E50
NP
SP
E70

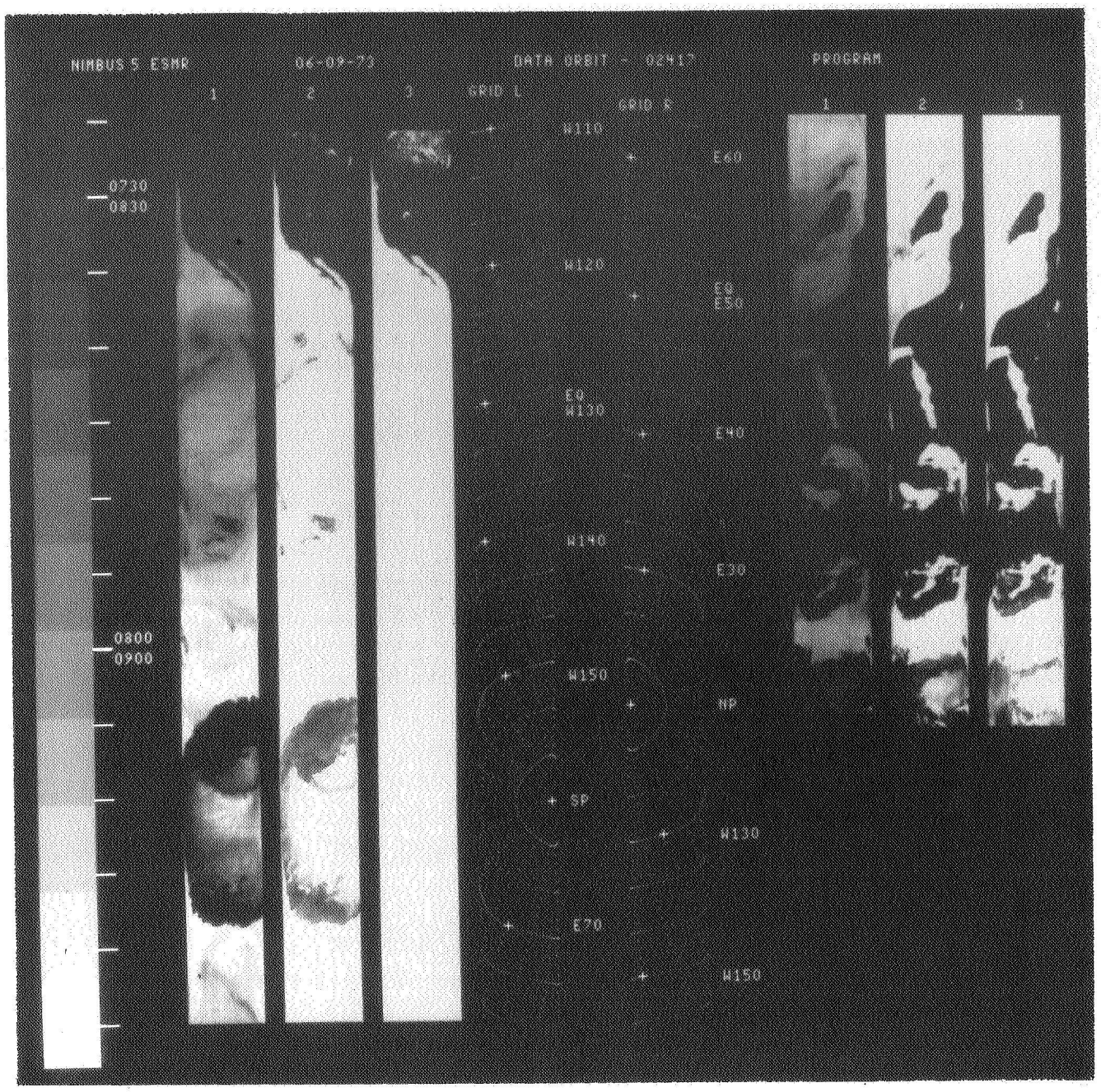

NIMBUS 5 ESMR
06-02-73
DATA ORBIT - 02340
PROGRAM
1
2
3
GRID L
GRID R
E160
W40
E140
EQ
W50
EQ
E140
W50
E130
W70
E110
NP
SP
E130
W20
E120
1400
1500
1430
1530


NIMBUS 5 ESMR
06-04-73
DATA ORBIT - 02354
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
W40
E140
W50
E130
EQ
W60
1500
1600
EQ
E120
W70
E110
W80
E100
NP
1530
1630
SP
E120

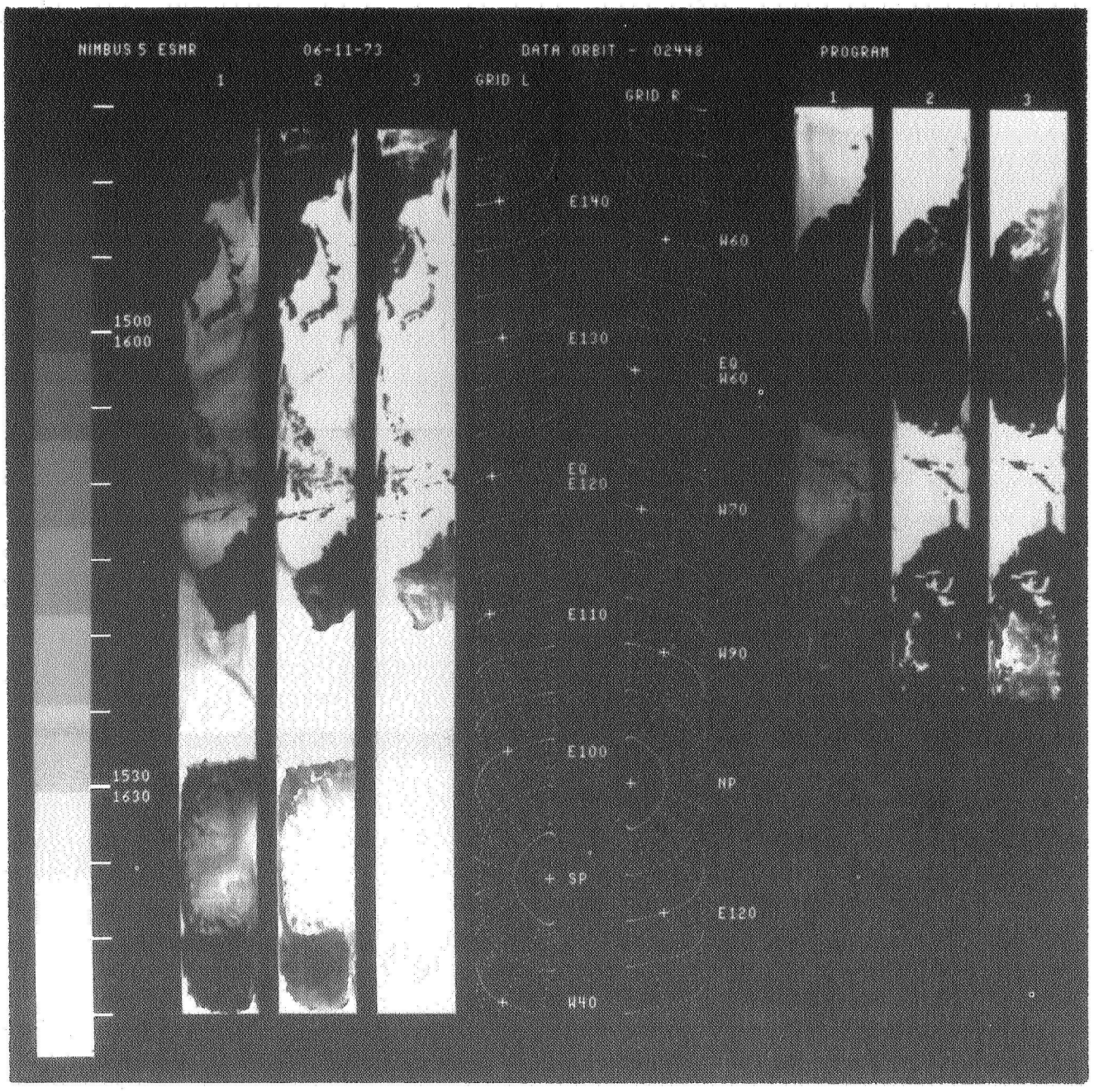

NIMBUS 5 ESMR
04-04-73
DATA ORBIT - 0617%
PROGRAM
GRID L
GRID R
1
2
3
W110
E0
E10
E0
W110
E40
W120
E50
W130
NP
SP
W110
E90
W130
E80
0430
0730
0700
0800

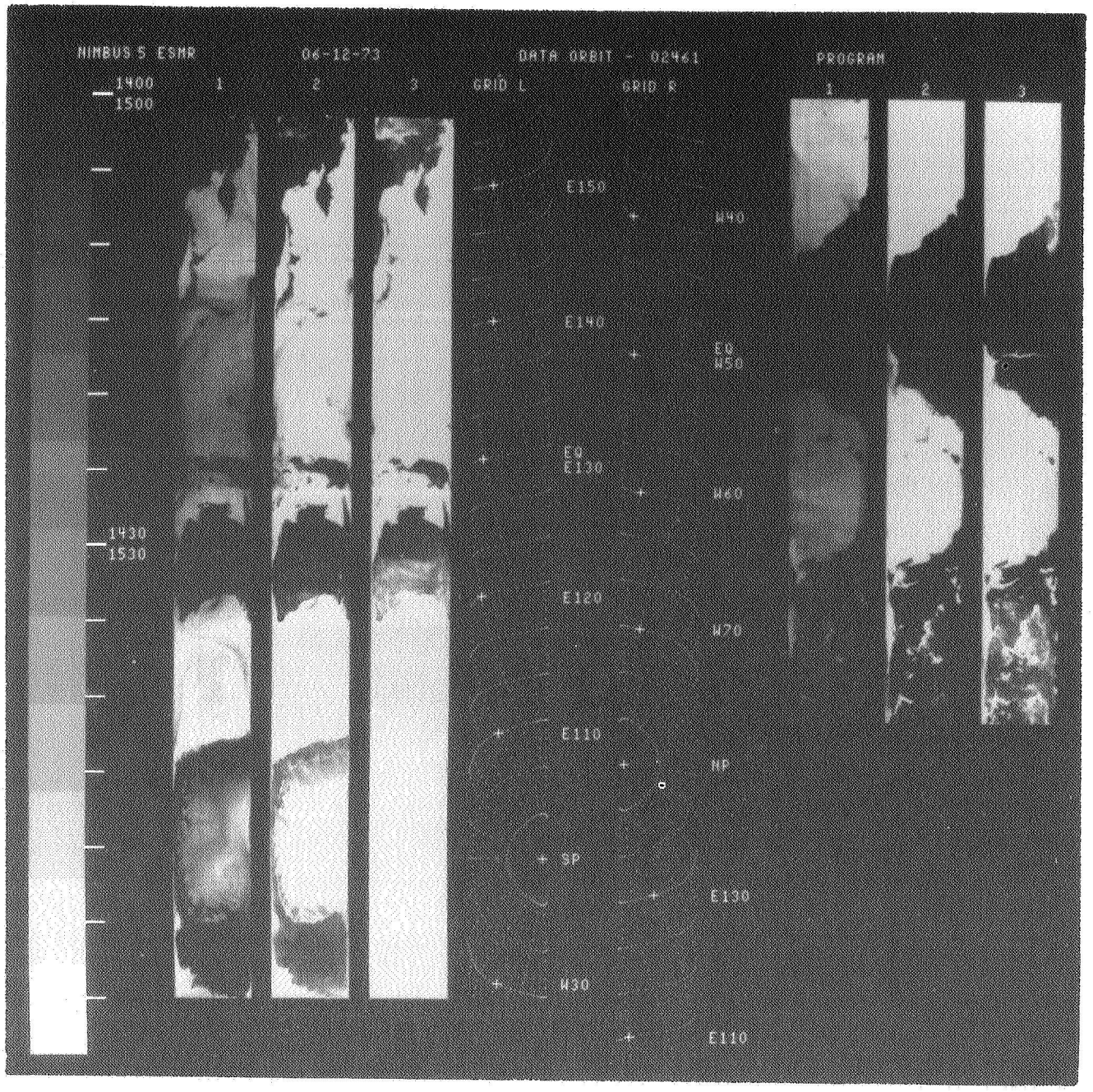

NIMBUS 5 ESMR
04-07-73
ORBIT - 02390
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
W120
EQ
E50
EQ
W120
E40
W130
E30
W150
NP
SP
W130
E70
W140
E60
EQ
W150
0730
0830
0800
0900

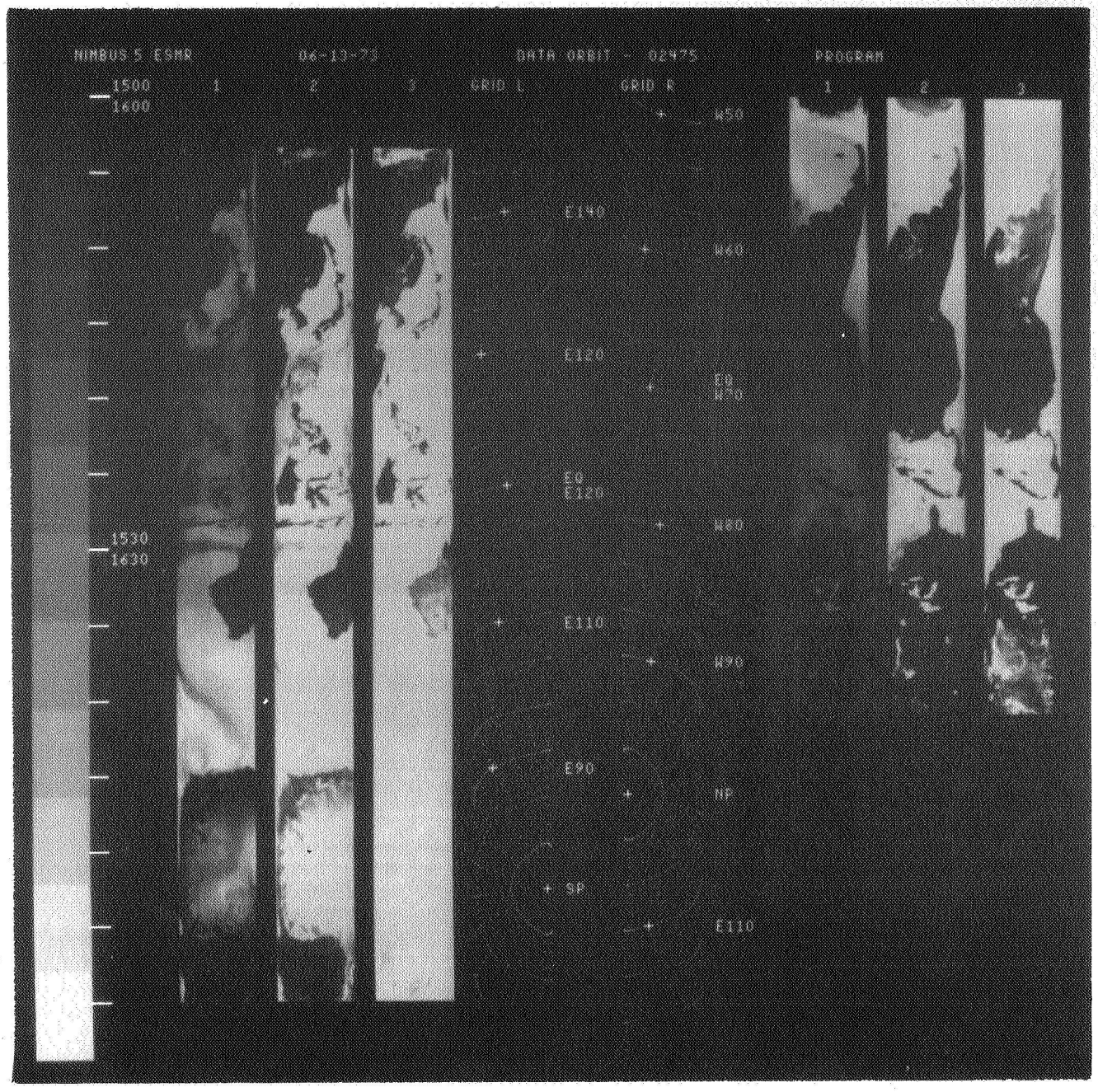

NIMBUS 5 ESMR
06-08-73
DATA ORBIT - 02403
PROGRAM
1
2
3
GRID L
GRID R
0630
0730
0700
0800
W100
EQ
E20
EQ
W110
E60
W120
E40
W140
NP
SP
W120
E90
W130
E70
EQ
W140

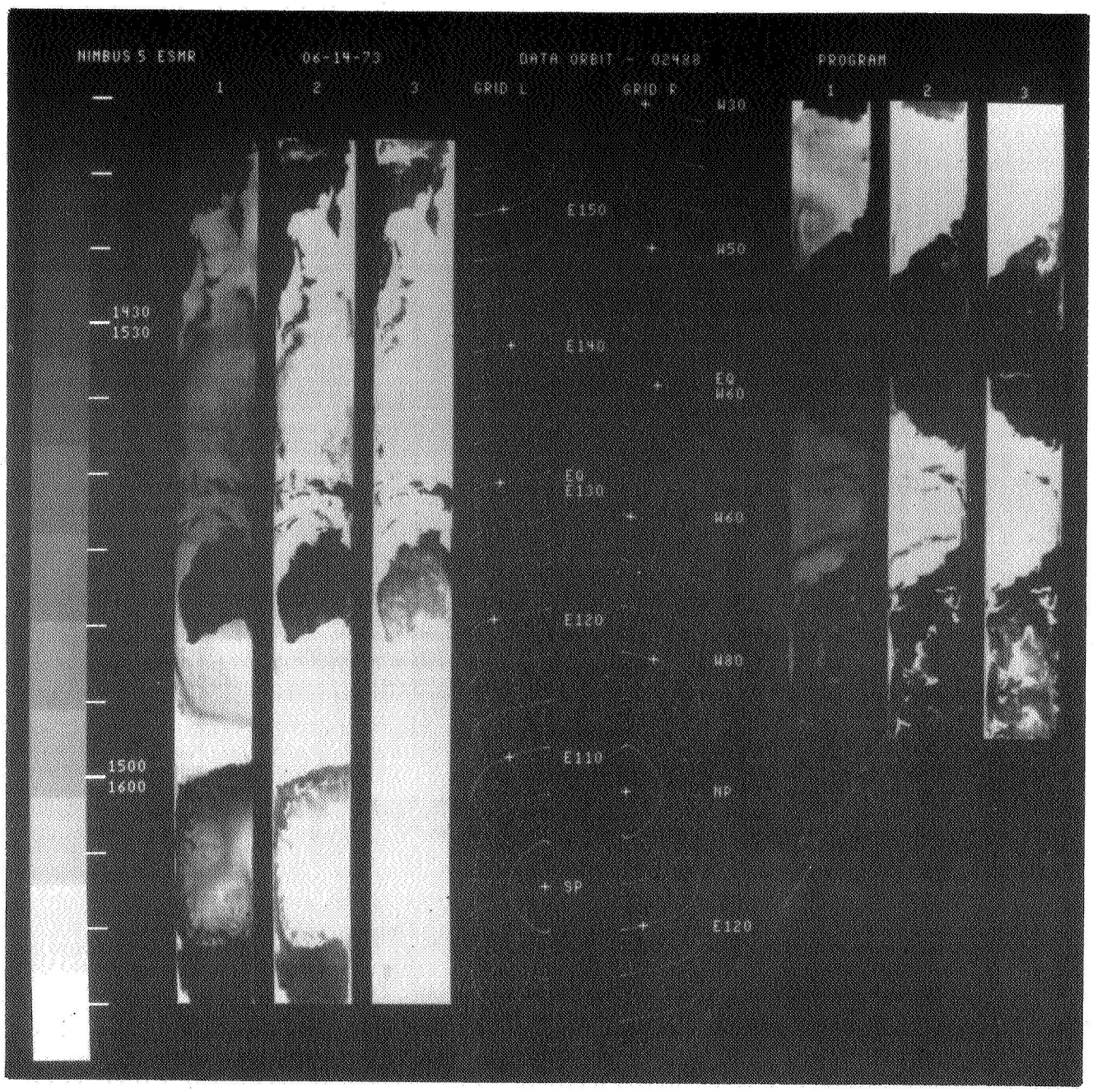

NIMBUS 5 ESMR
04-09-73
DATA ORBIT - 02417
PROGRAM
1
2
3
GRID L
GRID R
W110
E40
W120
EQ
E50
EQ
W130
E40
W140
E30
W150
NP
SP
W130
E20
W150
0730
0830
0800
0900

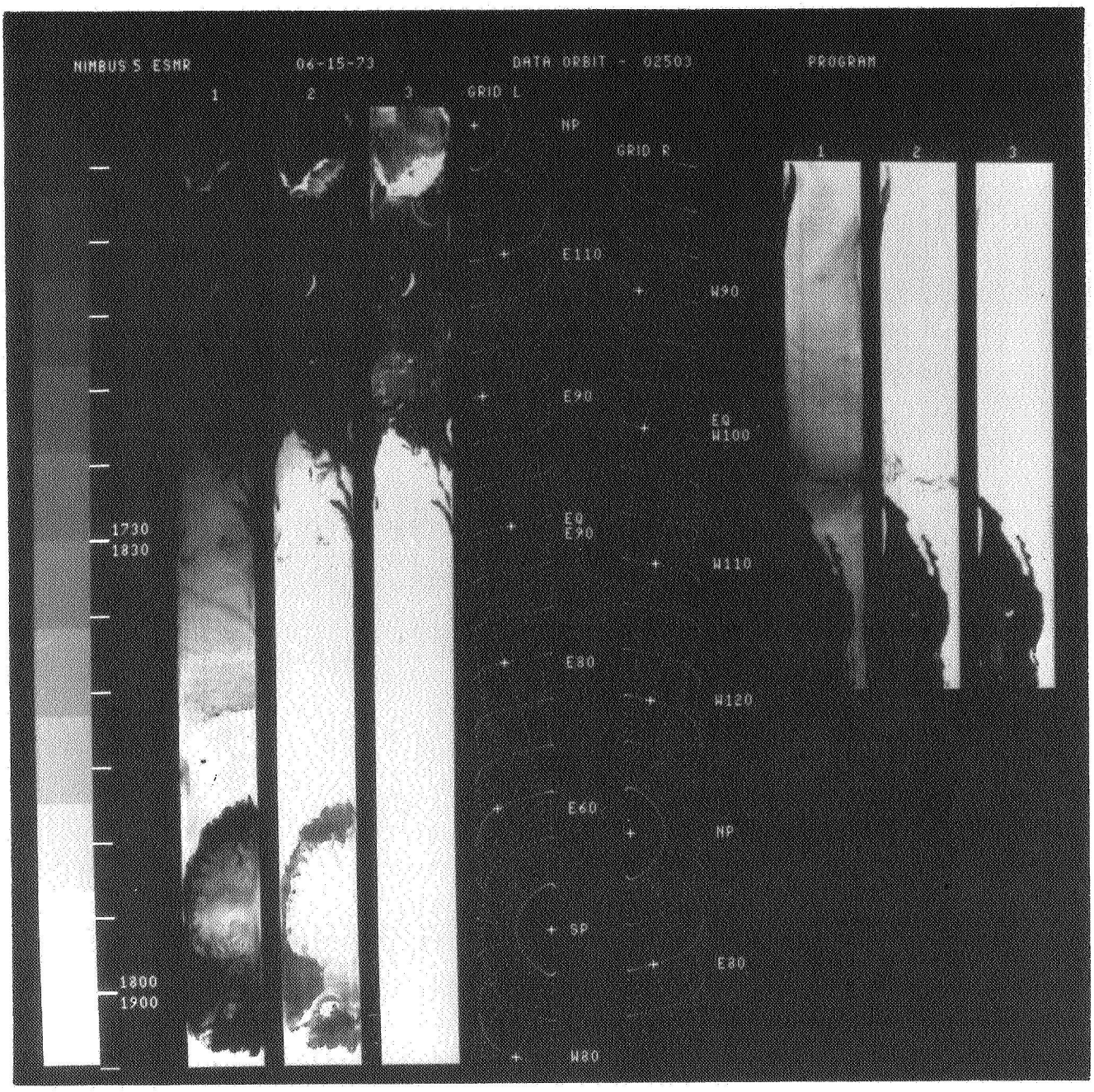

NIMBUS 5 ESMR
06-10-73
DATA ORBIT - 02437
PROGRAM
1
2
3
GRID L
GRID R
1900
2000
1930
2030
NP
W110
E30
W120
E40
EQ
W130
EQ
E40
W140
E50
W150
E30
NP
SP
E50

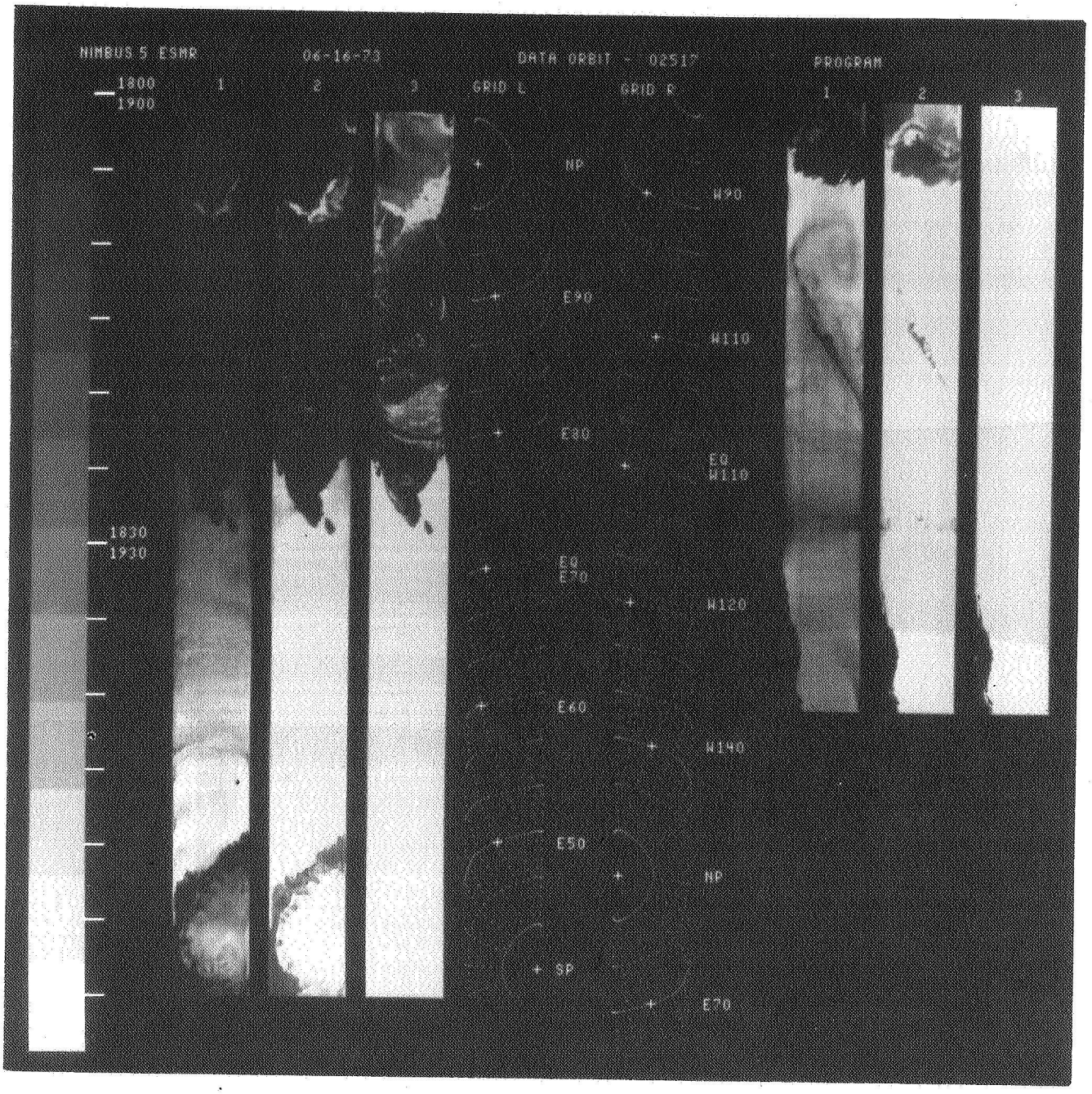

NIMBUS 5 ESMR
06-11-73
DATA ORBIT - 02448
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
E140
W60
1500
1600
E130
EQ
W60
EQ
E120
W70
E110
W80
E100
NP
1530
1630
SP
E120
W40

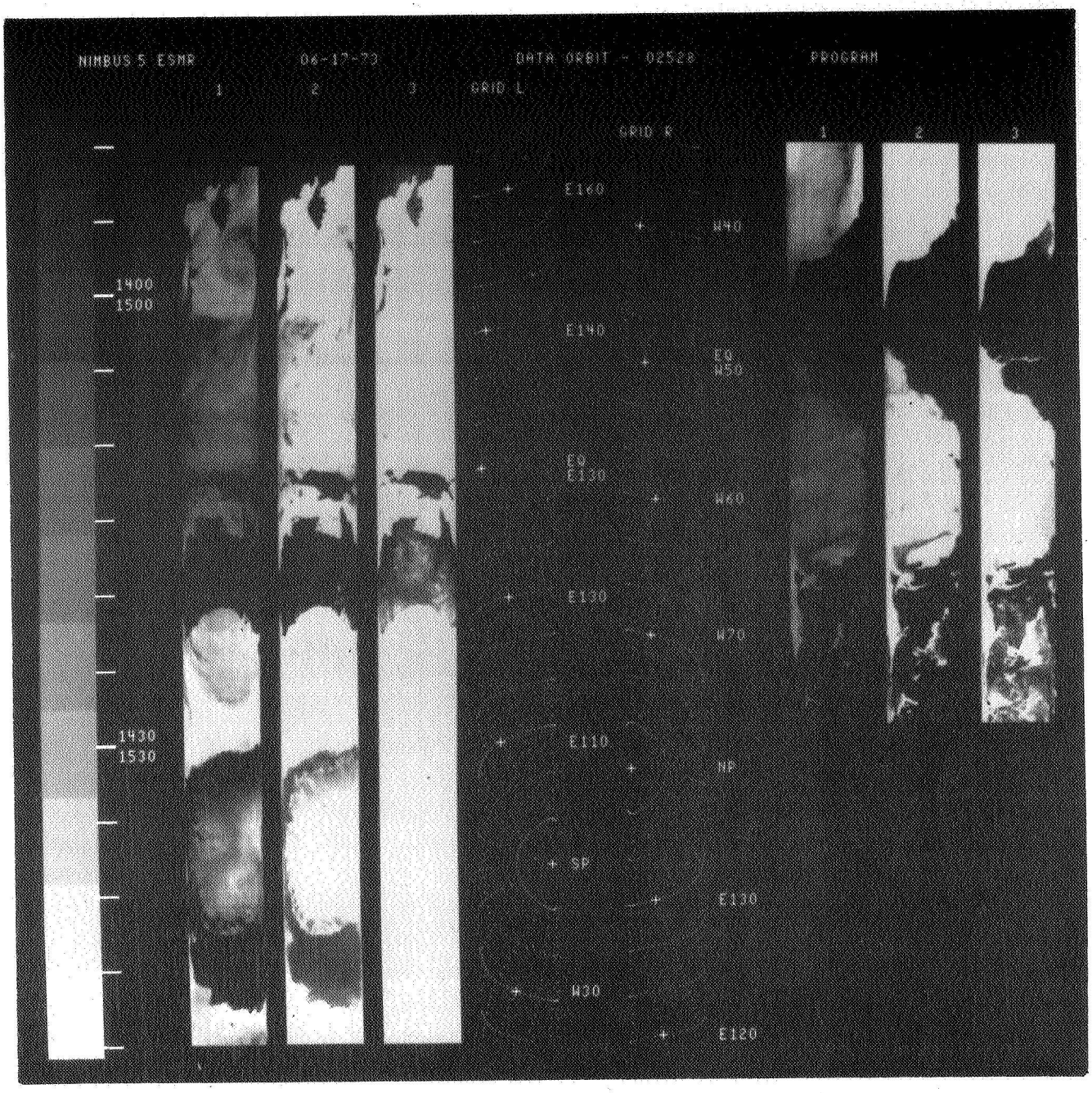

NIMBUS 5 ESMR
04-12-73
DATA ORBIT - 02461
PROGRAM
1
2
3
GRID L
GRID R
1400
1500
1430
1530
E150
W40
E140
EQ
W50
EQ
E130
W60
E120
W70
E110
NP
SP
E130
W30
E110

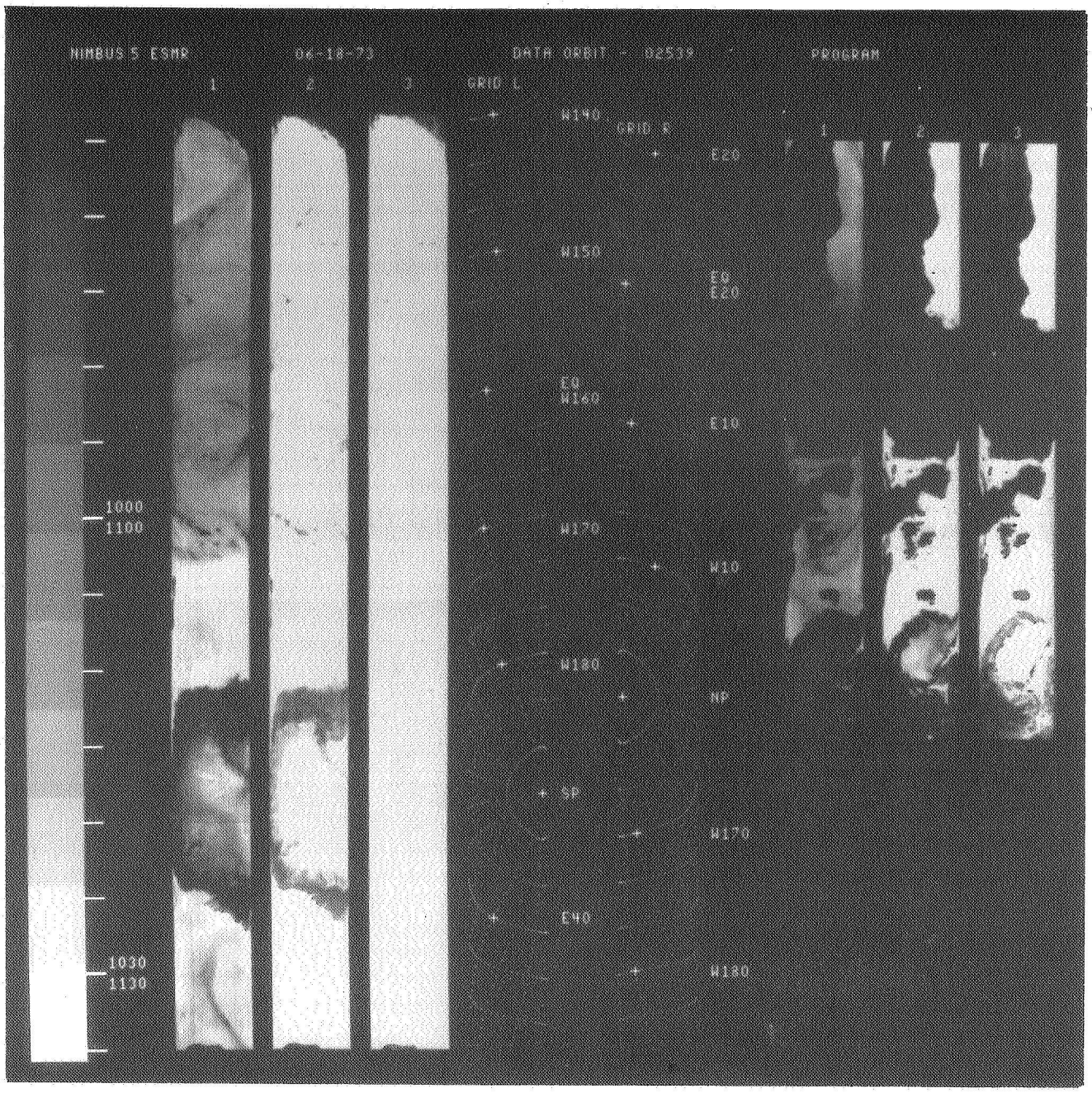

NIMBUS 5 ESMR
06-13-73
DATA ORBIT - 02475
PROGRAM
1500
1400
1530
1430
1
2
3
GRID L
GRID R
1
2
3
N50
E140
N40
E120
E0
N30
E0
E120
N20
E110
N90
E90
NP
SP
E110

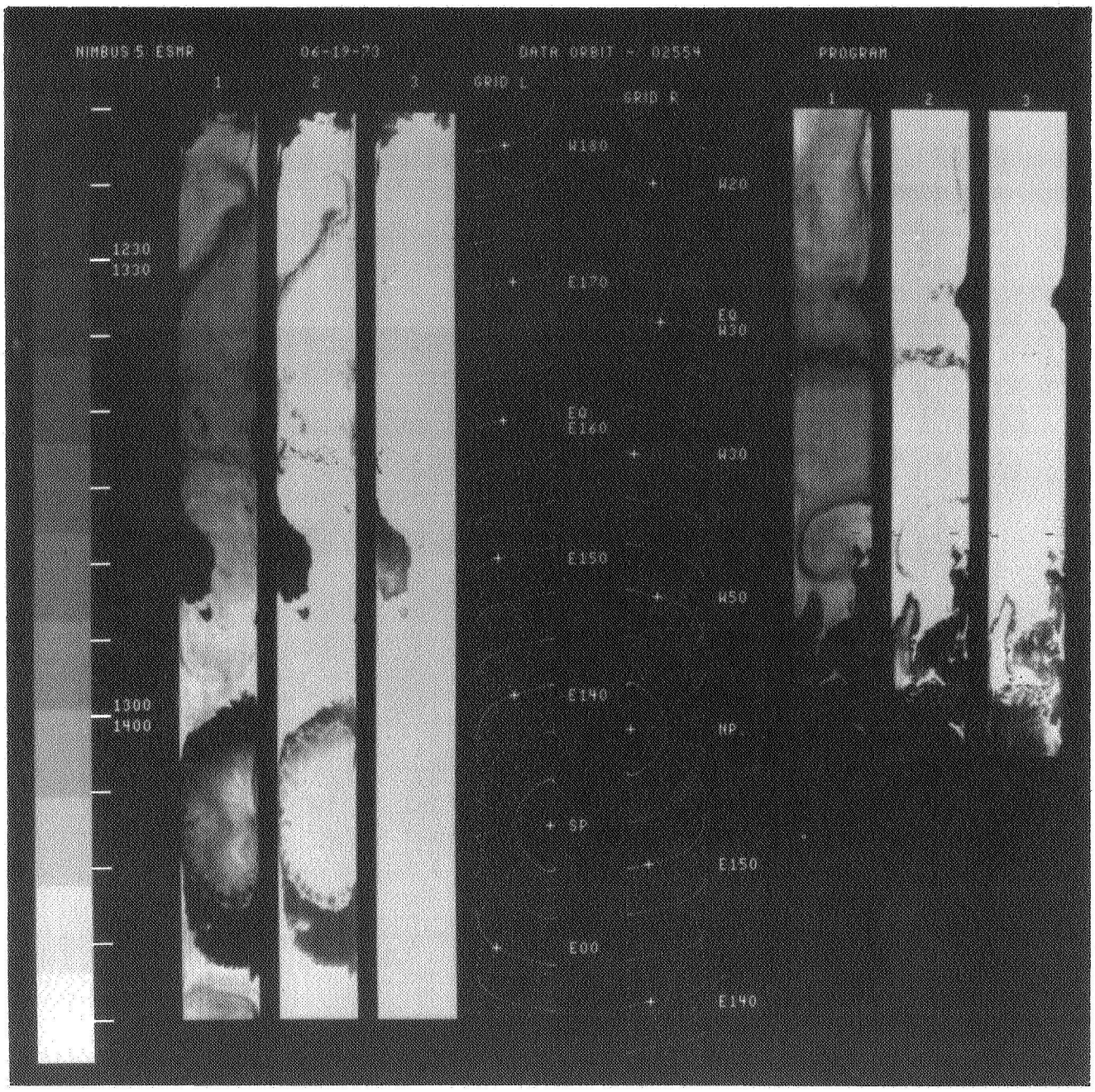

NIMBUS 5 ESMR
06-14-73
DATA ORBIT - 02488
PROGRAM
1
2
3
GRID L
GRID R
W30
E150
W50
1430
1530
E140
EQ
W40
EQ
E130
W60
E120
W80
1500
1600
E110
NP
SP
E120

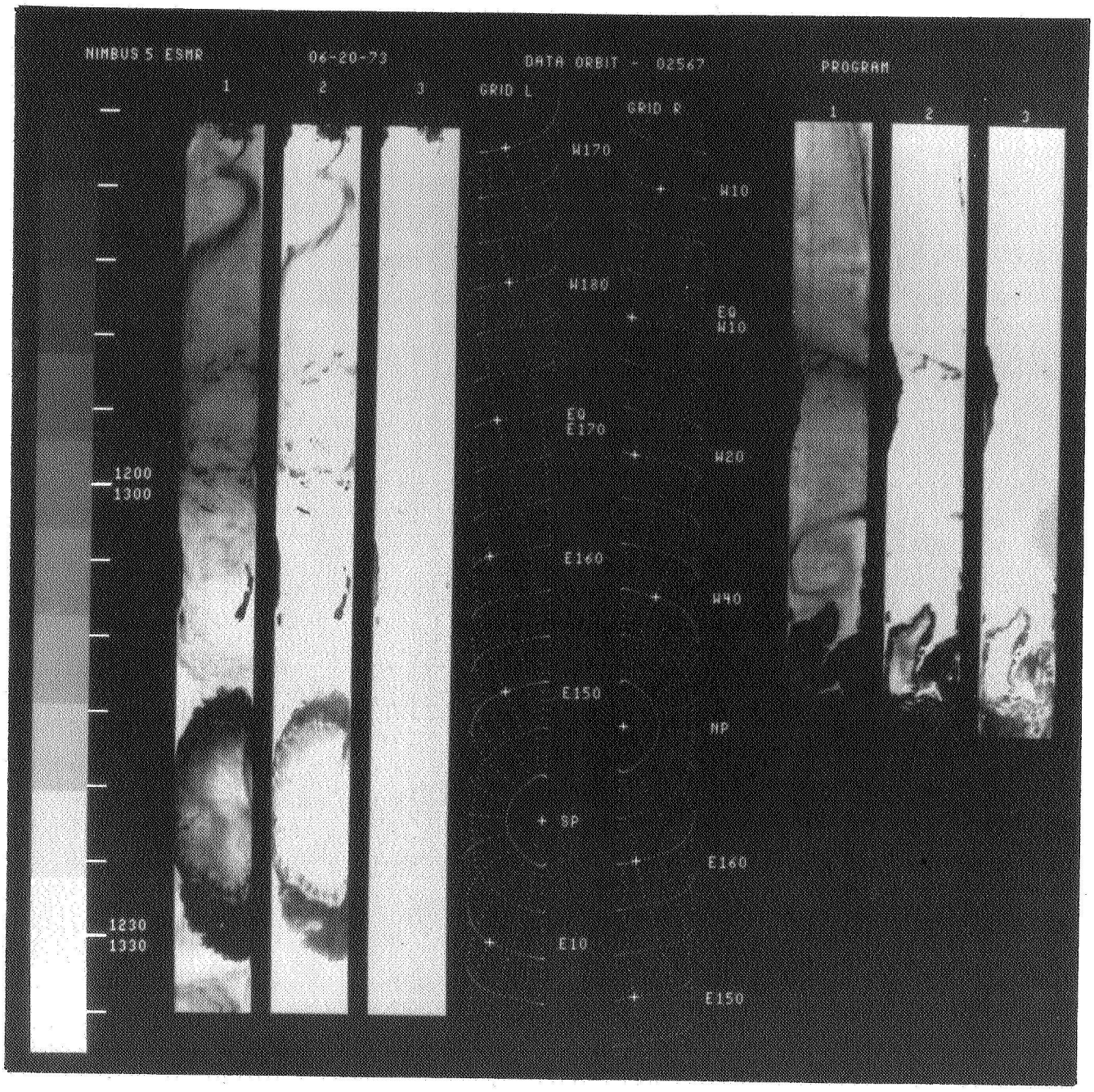

NIMBUS 5 ESMR
04-15-73
DATA ORBIT - 02503
PROGRAM
1
2
3
GRID L
NP
GRID R
1
2
3
E110
W90
E90
EQ
W100
EQ
E90
W110
E80
W120
E60
NP
SP
E30
W80
1730
1830
1800
1900

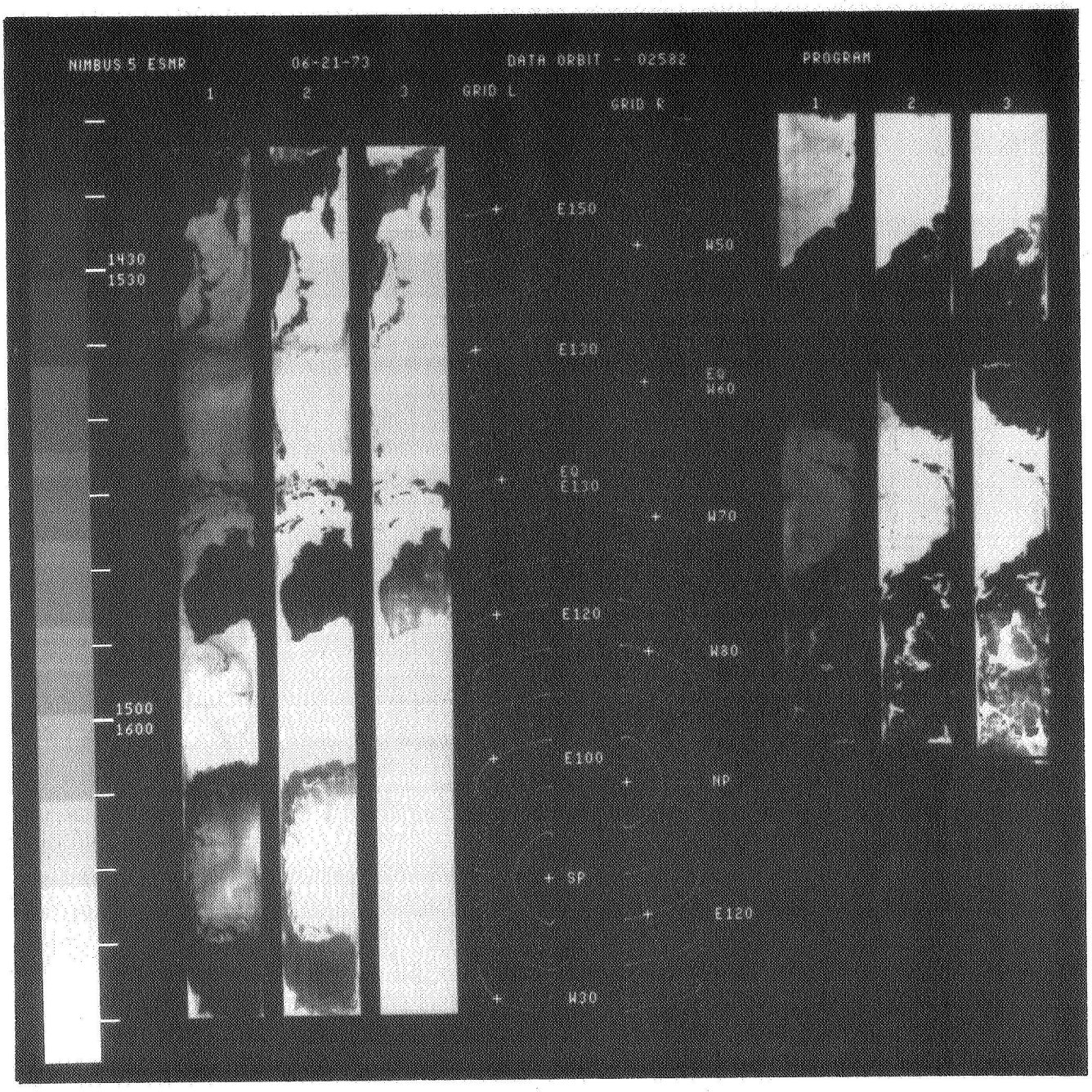

NIMBUS 5 ESMR
06-16-73
DATA ORBIT - 02517
PROGRAM
1
2
3
GRID L
GRID R
1800
1900
1830
1930
NP
W90
E90
W110
E80
EQ
W110
EQ
E70
W120
E60
W140
E50
NP
SP
E70

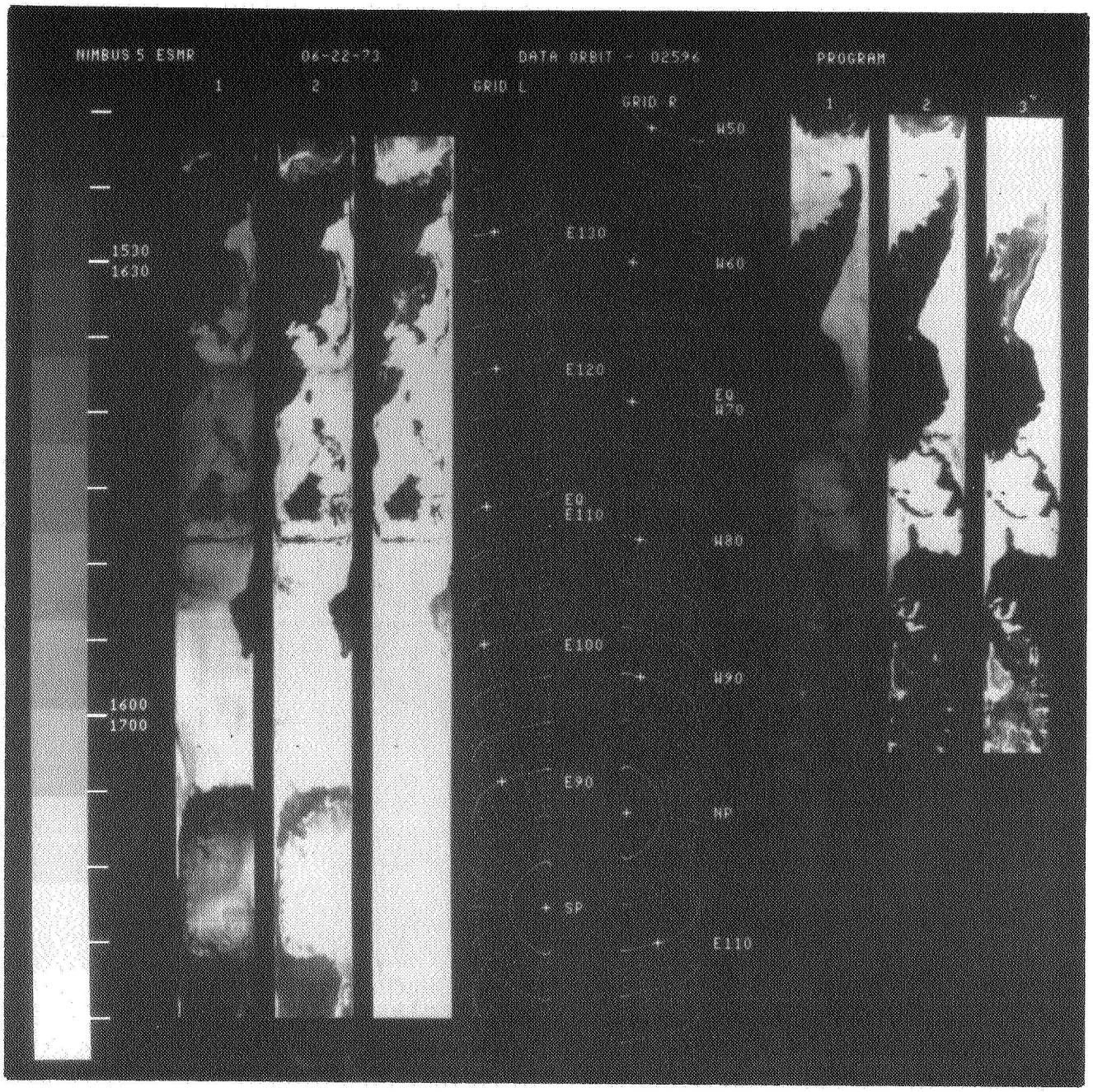

NIMBUS 5 ESMR
06-17-73
DATA ORBIT - 02528
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
E160
W40
1400
1500
E140
EQ
W50
EQ
E130
W60
E130
W70
1430
1530
E110
NP
SP
E130
W30
E120

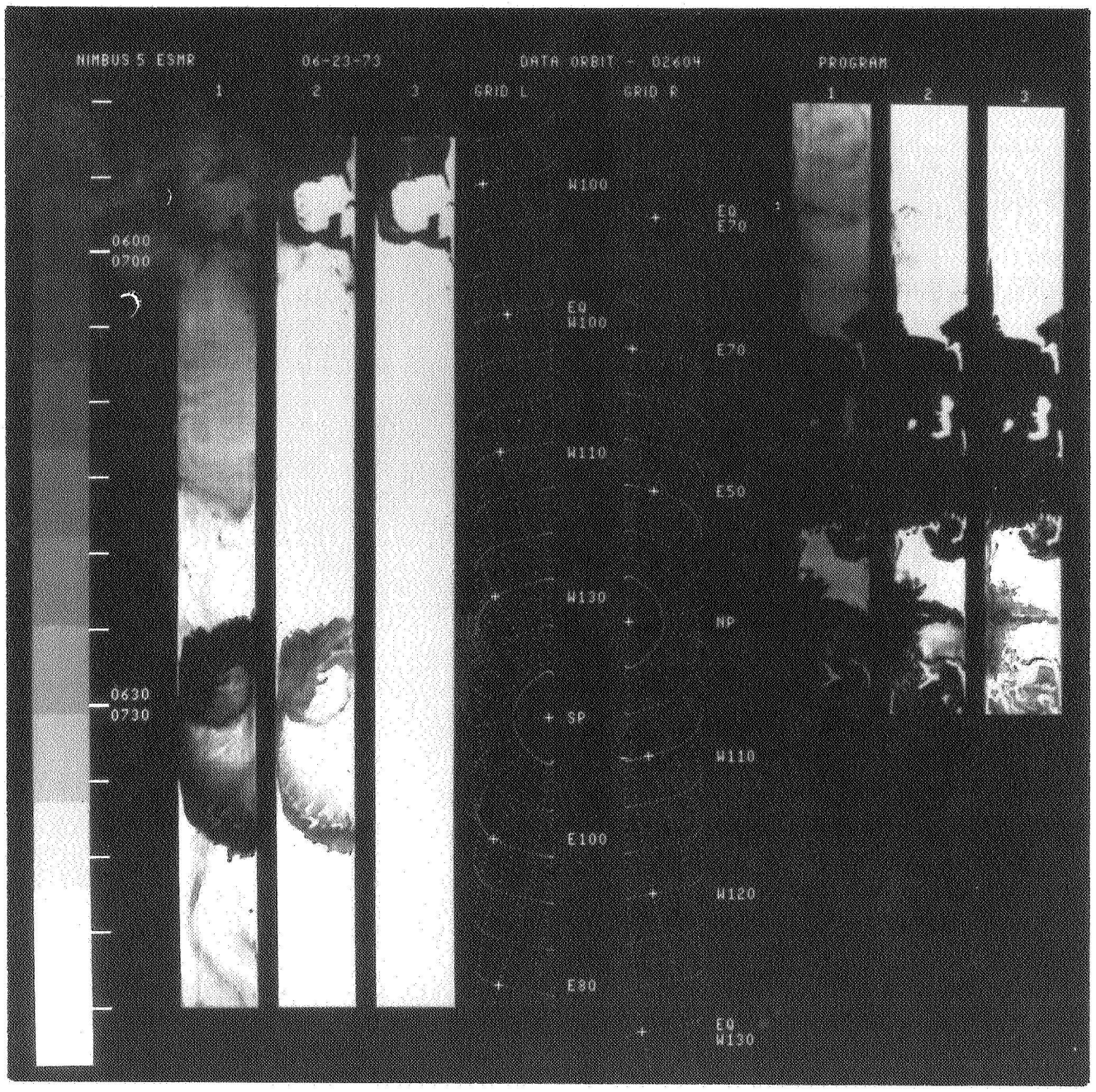

NIMBUS 5 ESMR
04-18-73
DATA ORBIT - 02539 -
PROGRAM
1
2
3
GRID L
GRID E
W140
E20
W150
EQ
E20
EQ
W160
E10
1000
1100
W170
W10
W180
NP
SP
W170
E40
W180
1030
1130

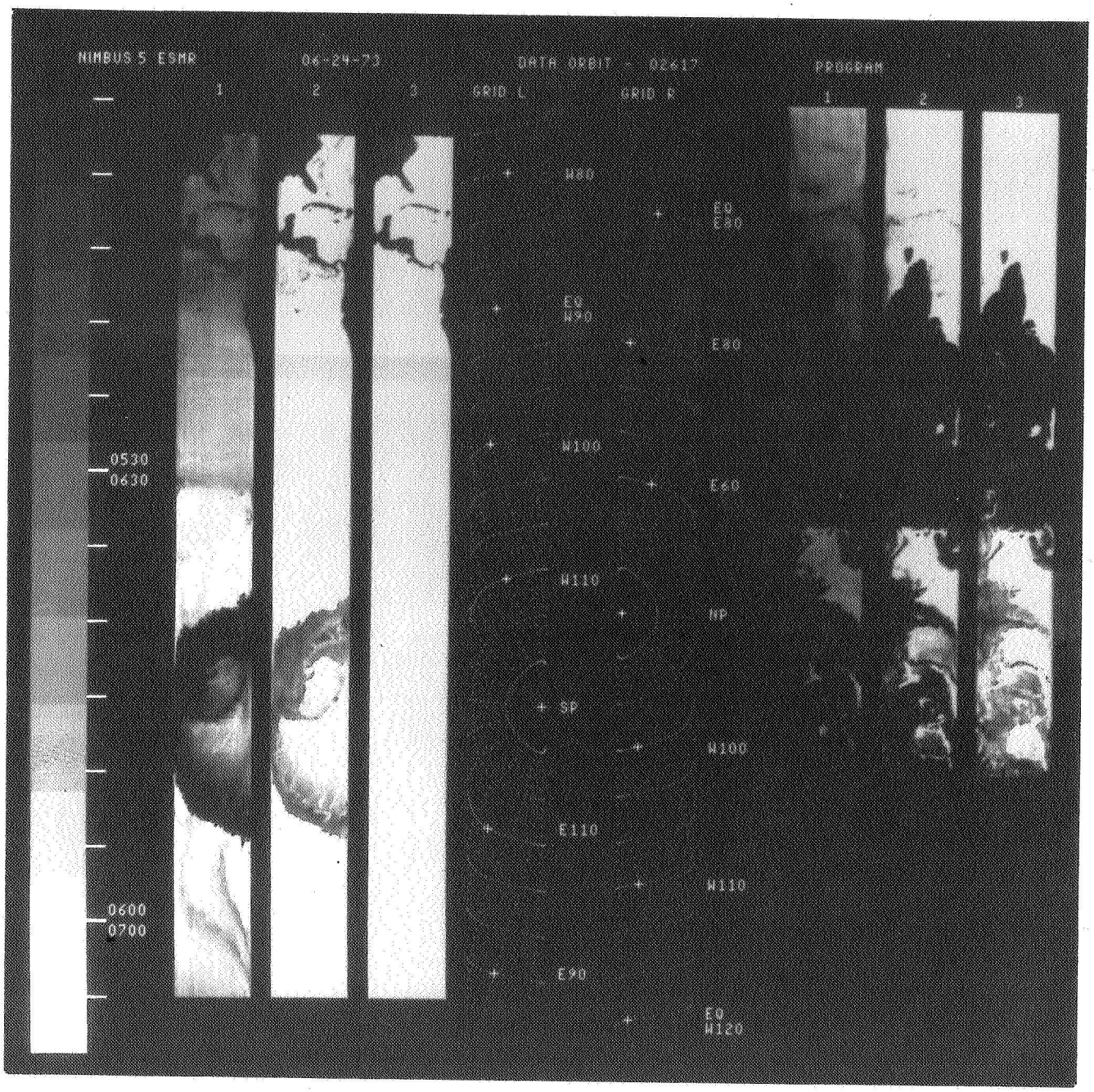

NIMBUS 5 ESMR
04-19-73
DATA ORBIT - 02554
PROGRAM
1
2
3
GRID L
GRID R
1230
1330
1300
1400
W160
W20
E120
EQ
W30
EQ
E160
W30
E150
W50
E140
NP
SP
E150
E00
E140

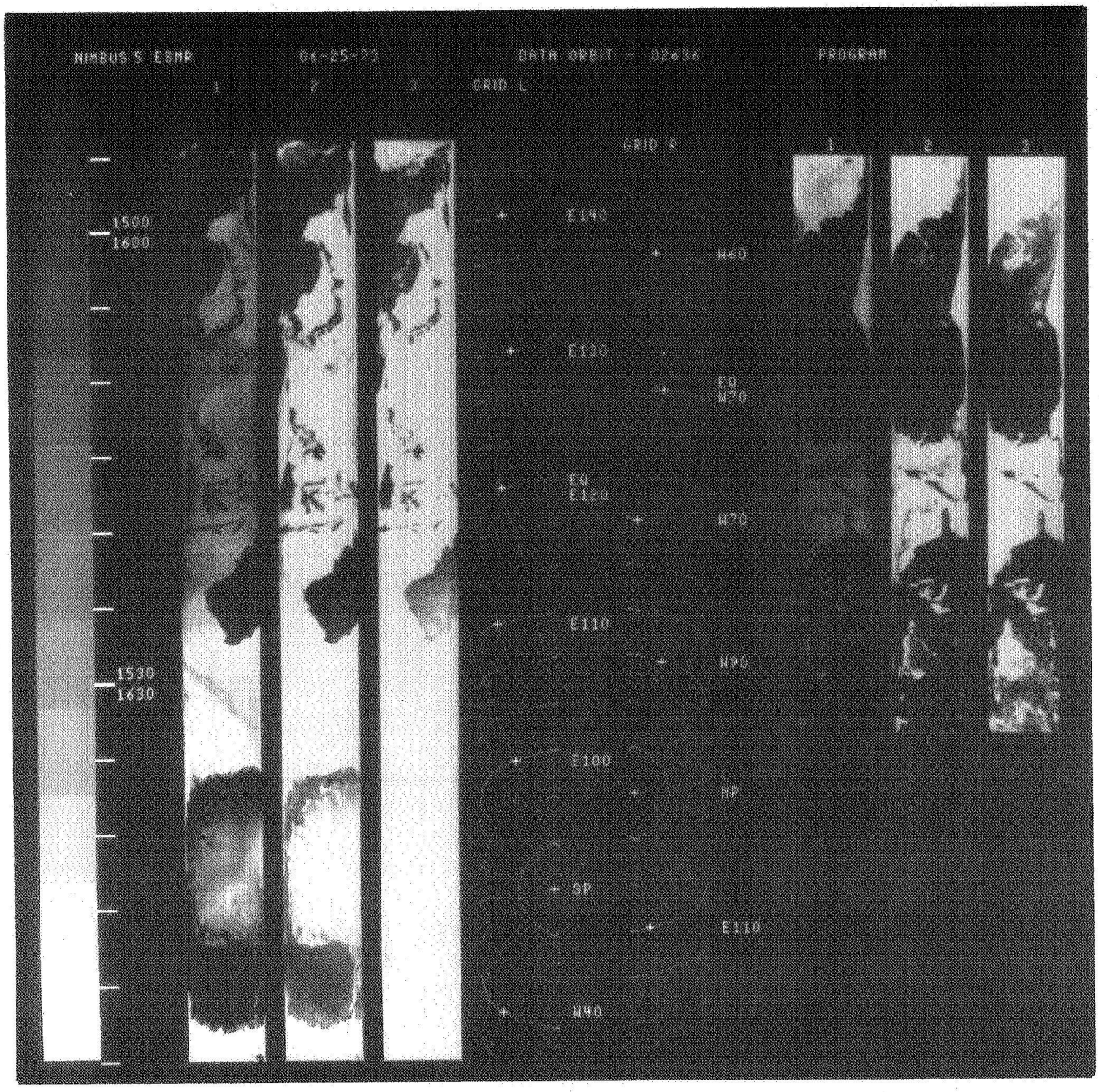

NIMBUS 5 ESMR
06-20-73
DATA ORBIT - 02567
PROGRAM
1
2
3
GRID L
GRID R
W170
W10
W180
EQ
W10
EQ
E170
W20
E160
W40
E150
NP
SP
E160
E10
E150
1200
1300
1230
1330

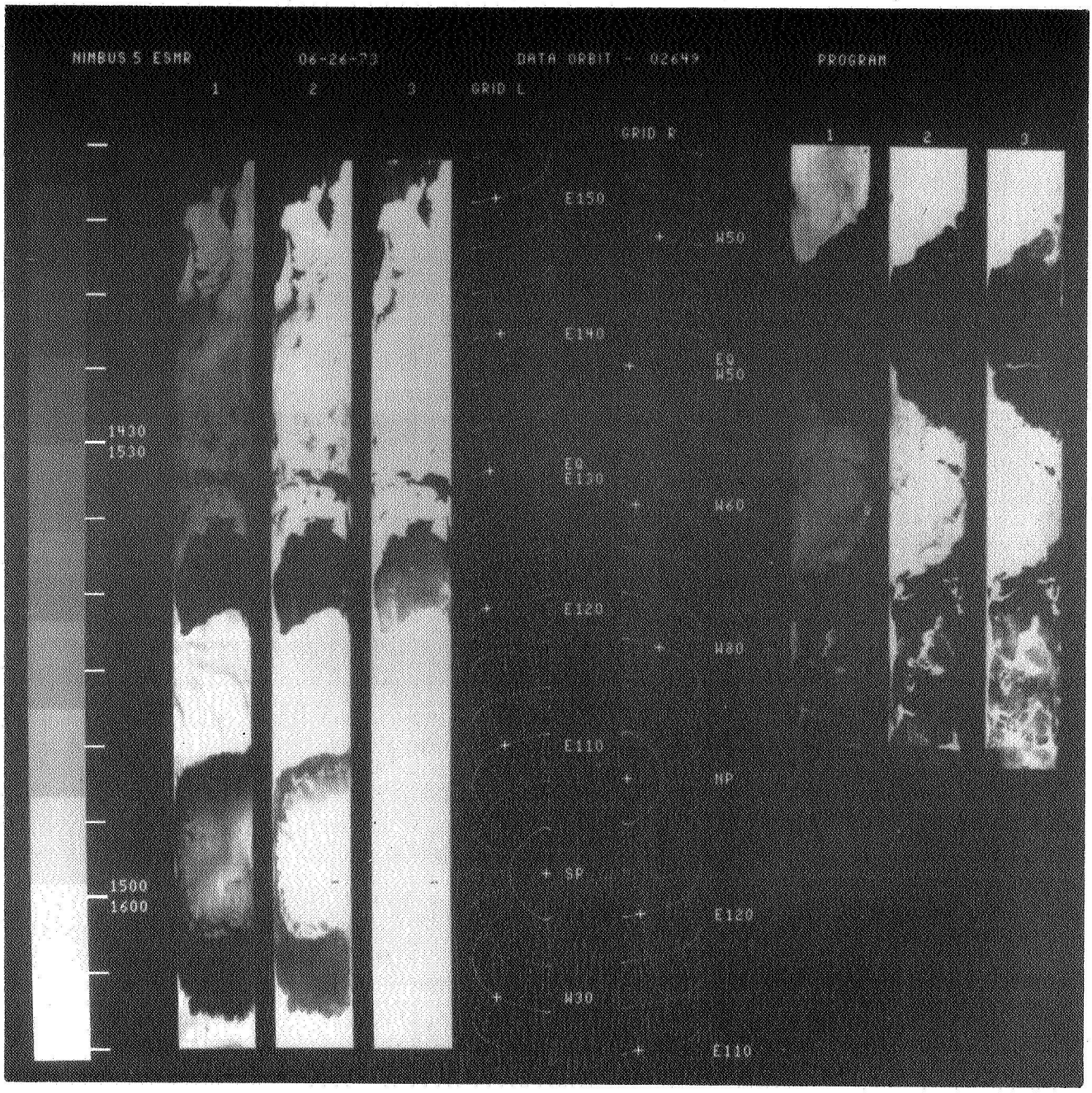

NIMBUS 5 ESMR
04-21-73
DATA ORBIT - 02582
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
E150
W50
E130
E0
W60
E0
E110
W70
E120
W30
1430
1530
1500
1600
E100
NP
SP
E120
W30

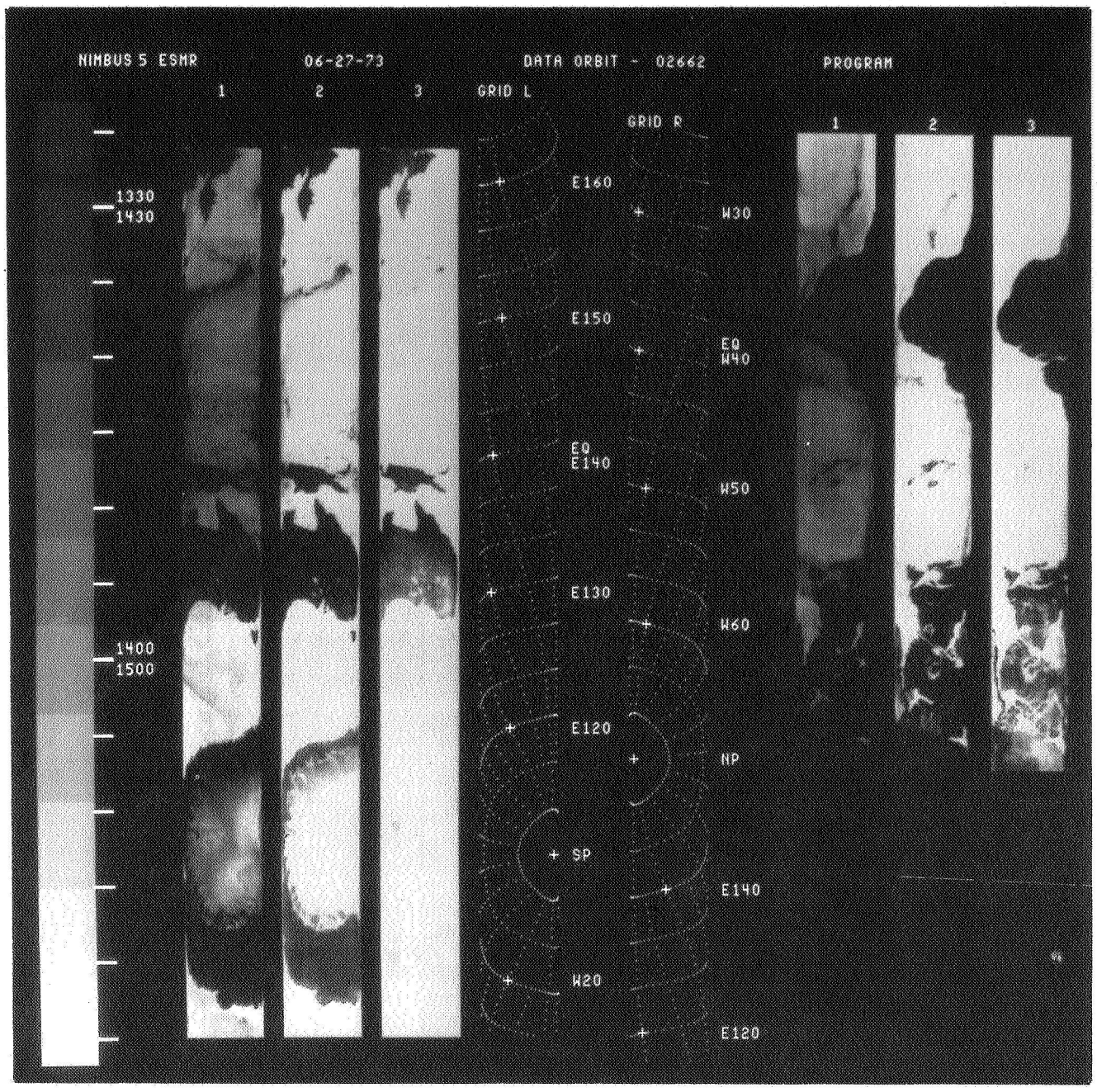

NIMBUS 5 ESMR
04-22-73
DATA ORBIT - 02594
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
W50
E130
W60
E120
EQ
W70
EQ
E110
W80
E100
W90
E90
NP
SP
E110
1530
1630
1600
1700

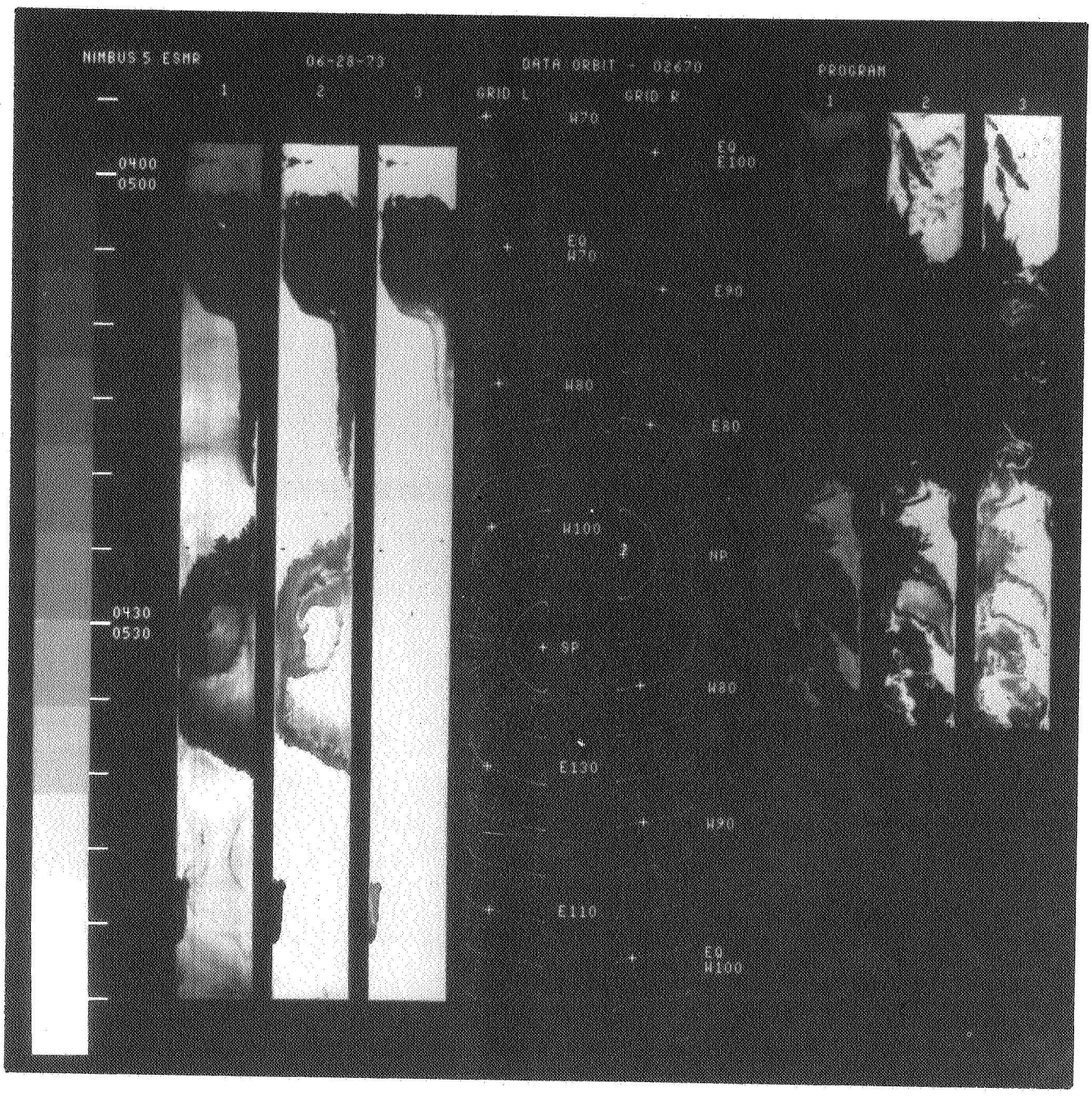

NIMBUS 5 ESMR
06-23-73
DATA ORBIT - 02604
PROGRAM
1
2
3
GRID L
GRID R
0600
0700
0630
0730
W100
EQ
E70
EQ
W100
E70
W110
E30
W130
NP
SP
W110
E100
W120
E80
EQ
W130

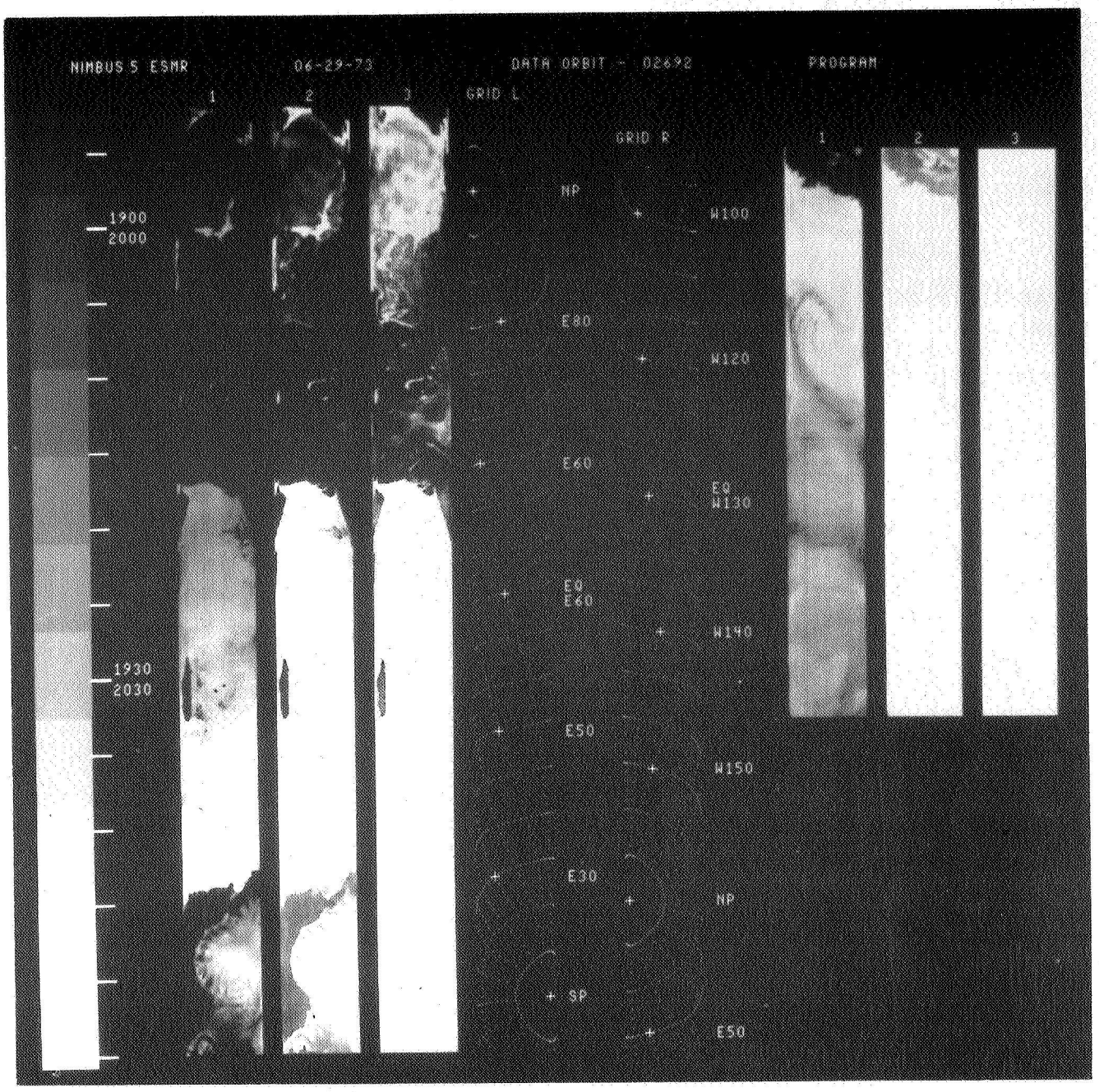

NIMBUS 5 ESMR
04-24-73
DATA ORBIT - 02417
PROGRAM
1
2
3
GRID L
GRID R
W60
EQ
E30
EQ
W90
E90
W100
E60
W110
NP
SP
W100
E110
W110
E90
EQ
W120
0530
0630
0600
0700

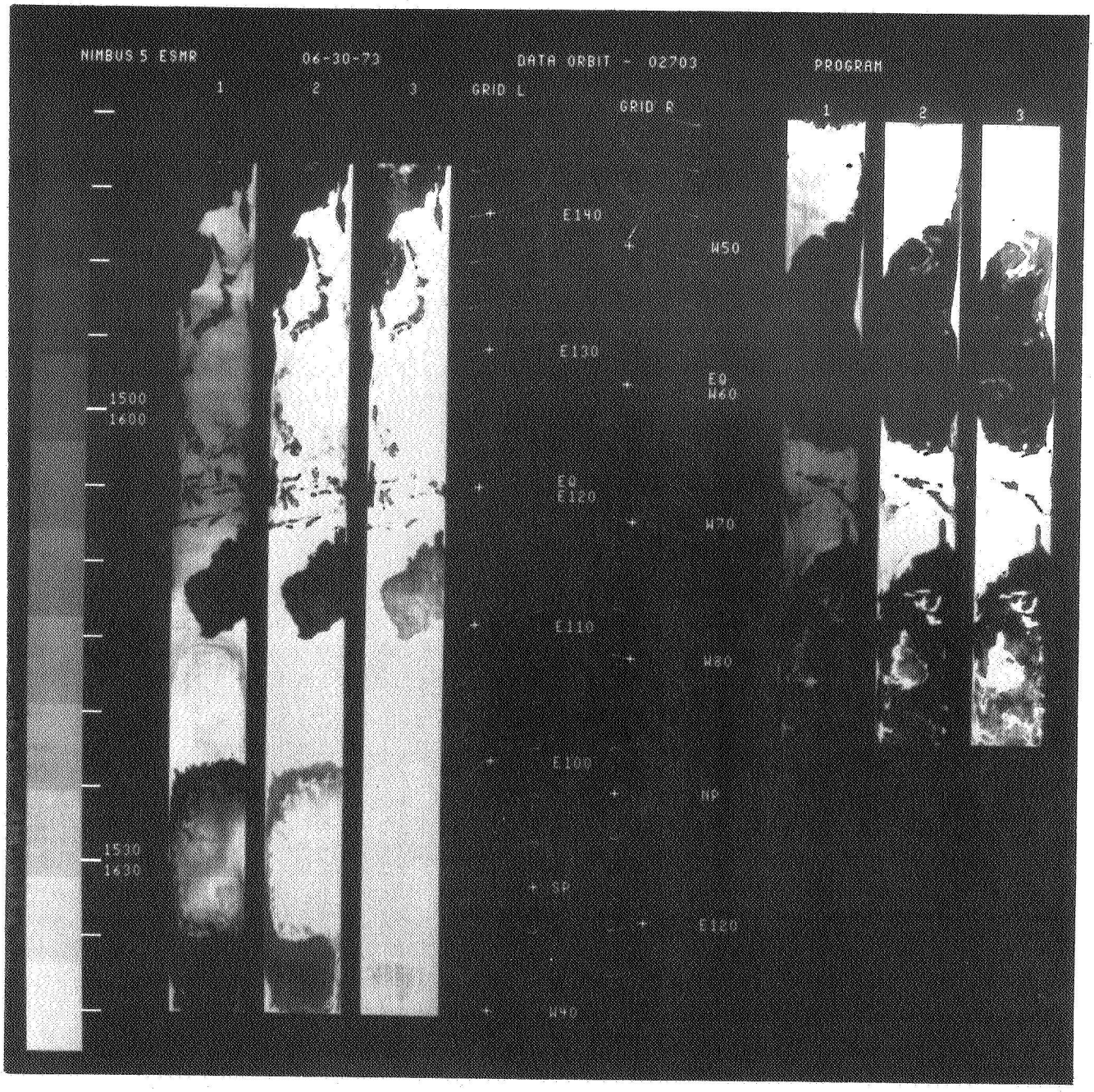

NIMBUS 5 ESMR
06-25-73
DATA ORBIT - 02636
PROGRAM
1
2
3
GRID L
GRID R
1500
1600
1530
1630
E140
W60
E120
EQ
W70
EQ
E120
W70
E110
W90
E100
NP
SP
E110
W40

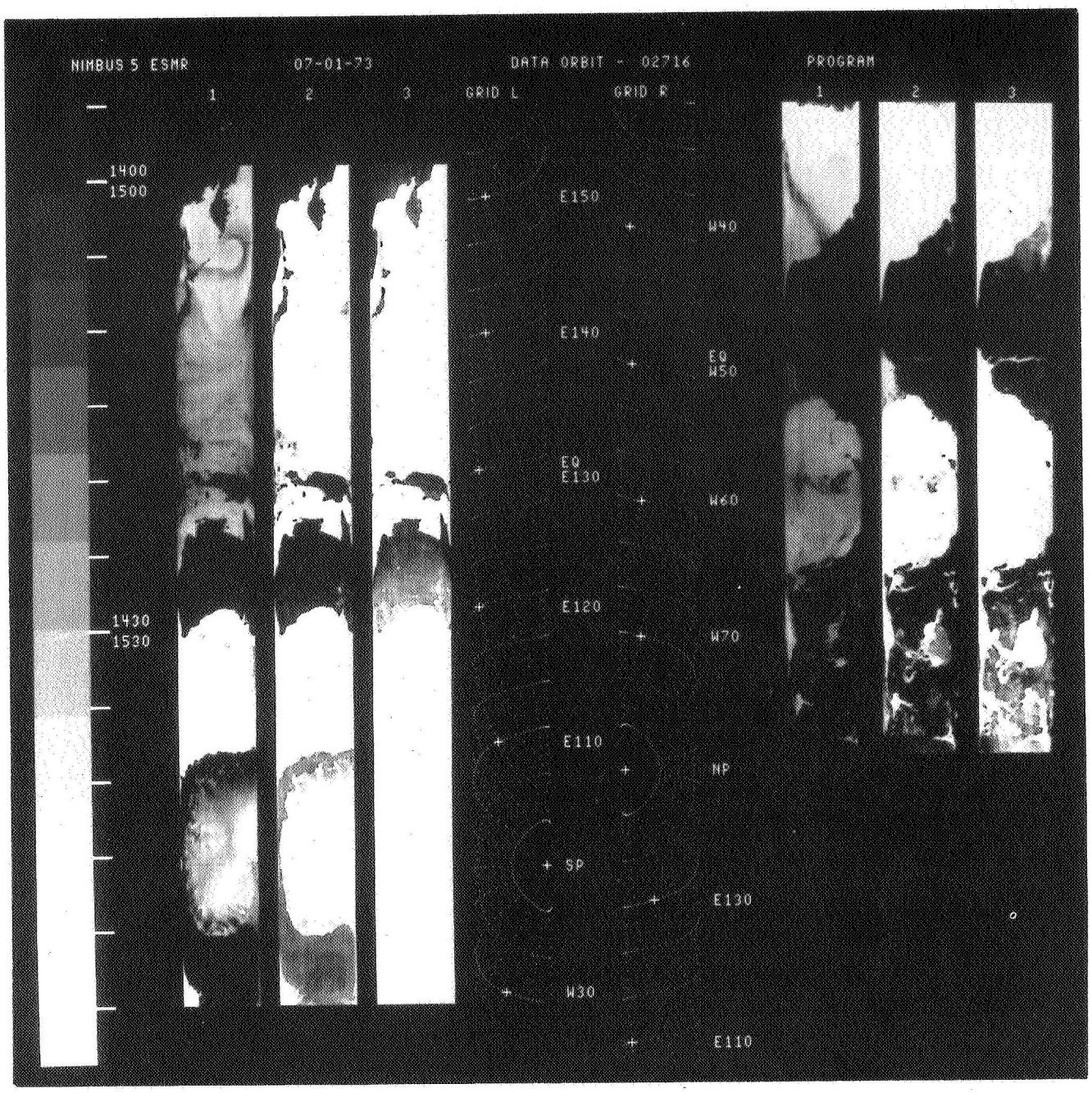

NIMBUS 5 ESMR
06-24-73
DATA ORBIT - 02649
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
E150
W50
E140
E0
W50
E0
E130
W40
E120
W30
E110
NP
SP
E120
W30
E110
1430
1530
1500
1600

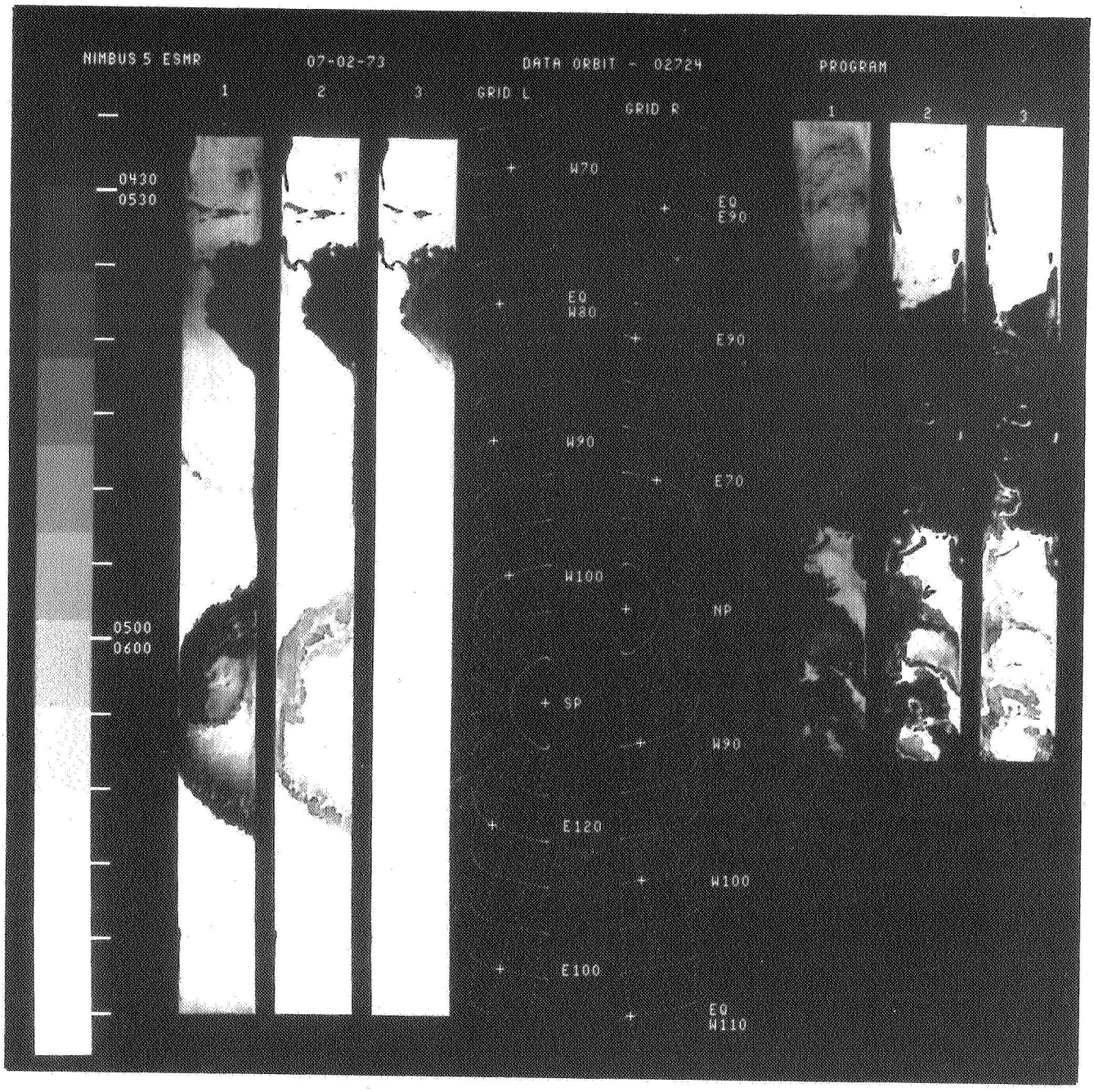

NIMBUS 5 ESMR
06-27-73
DATA ORBIT - 02662
PROGRAM
1
2
3
GRID L
GRID R
1330
1430
1400
1500
E160
W30
E150
EQ
W40
EQ
E140
W50
E130
W60
E120
NP
SP
E140
W20
E120

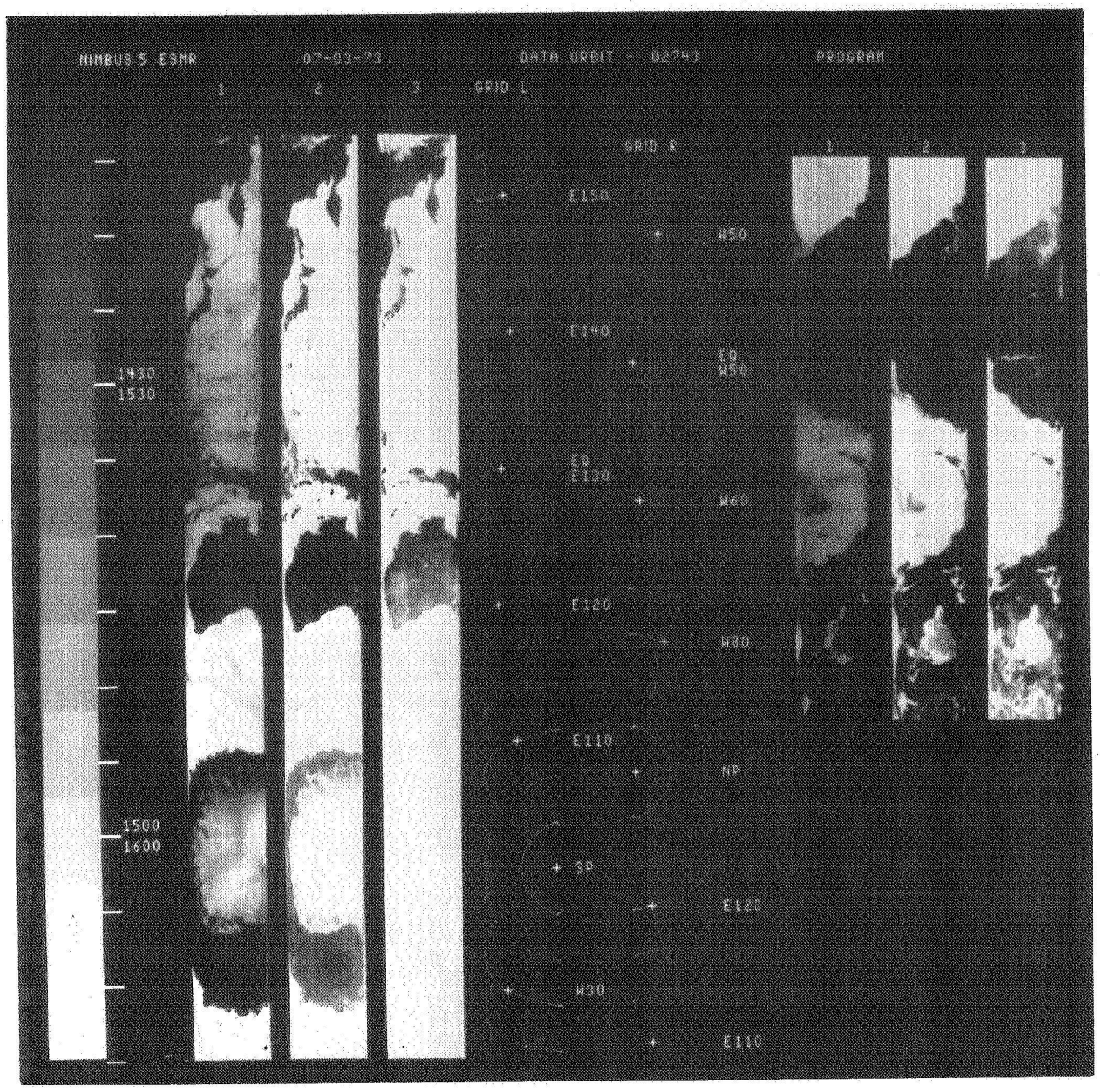

NIMBUS 5 ESMR
04-28-73
DATA ORBIT - 02670
PROGRAM
1
2
3
GRID L
GRID R
W70
EQ
E100
EQ
W70
E90
W80
E80
W100
NP
0400
0500
0430
0530
SP
W80
E130
W90
E110
EQ
W100

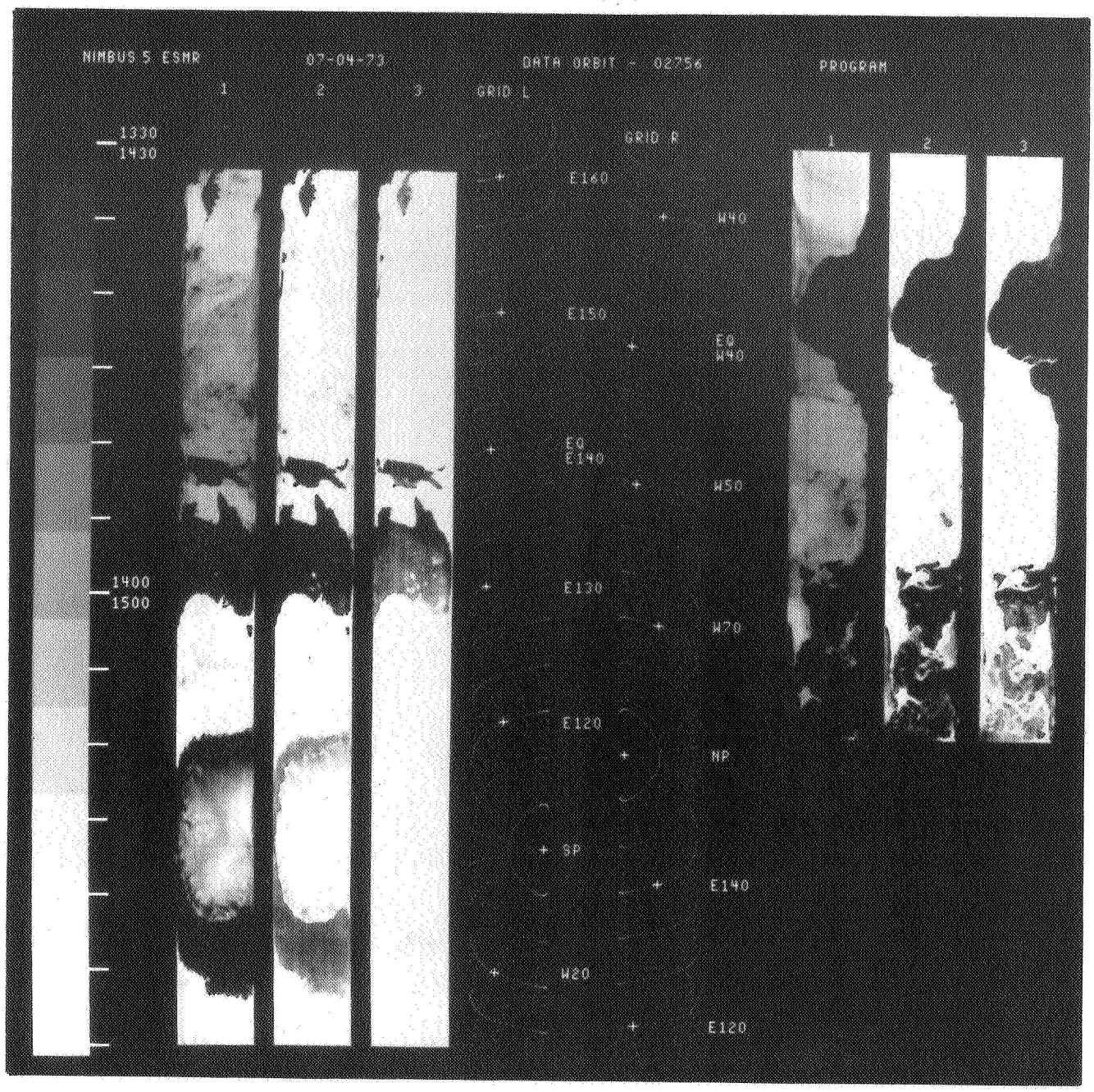

NIMBUS 5 ESMR
06-29-73
DATA ORBIT - 02692
PROGRAM
1
2
3
GRID L
GRID R
1900
2000
1930
2030
NP
W100
E40
W120
E60
EQ
W130
EQ
E60
W140
E50
W150
E30
NP
SP
E50

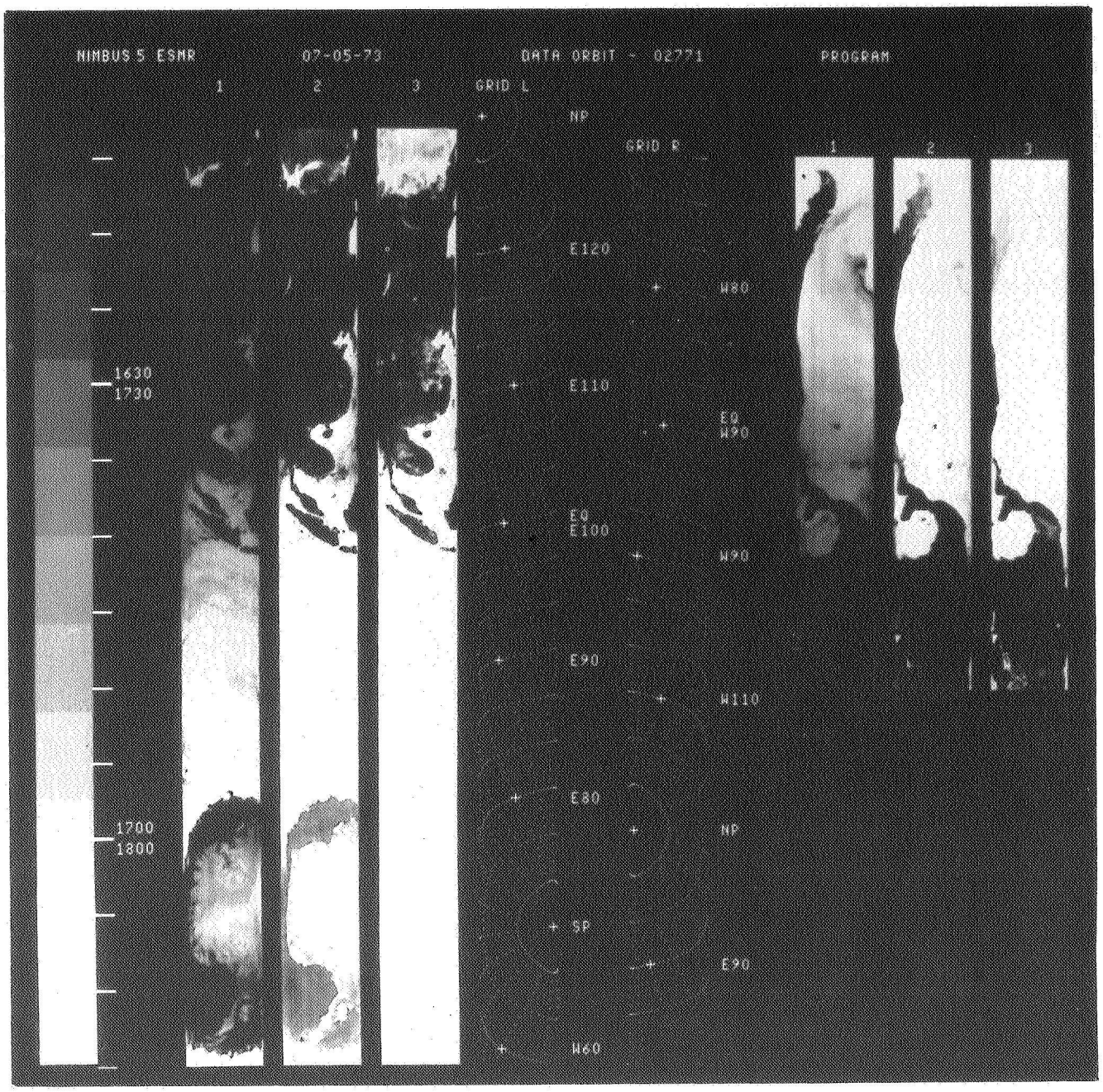

NIMBUS 5 ESMR
06-30-73
DATA ORBIT - 02703
PROGRAM
1
2
3
GRID L
GRID R
E140
W50
E130
E0
W60
E0
E120
W70
E110
W80
E100
NP
SP
E120
W40
1500
1600
1530
1630

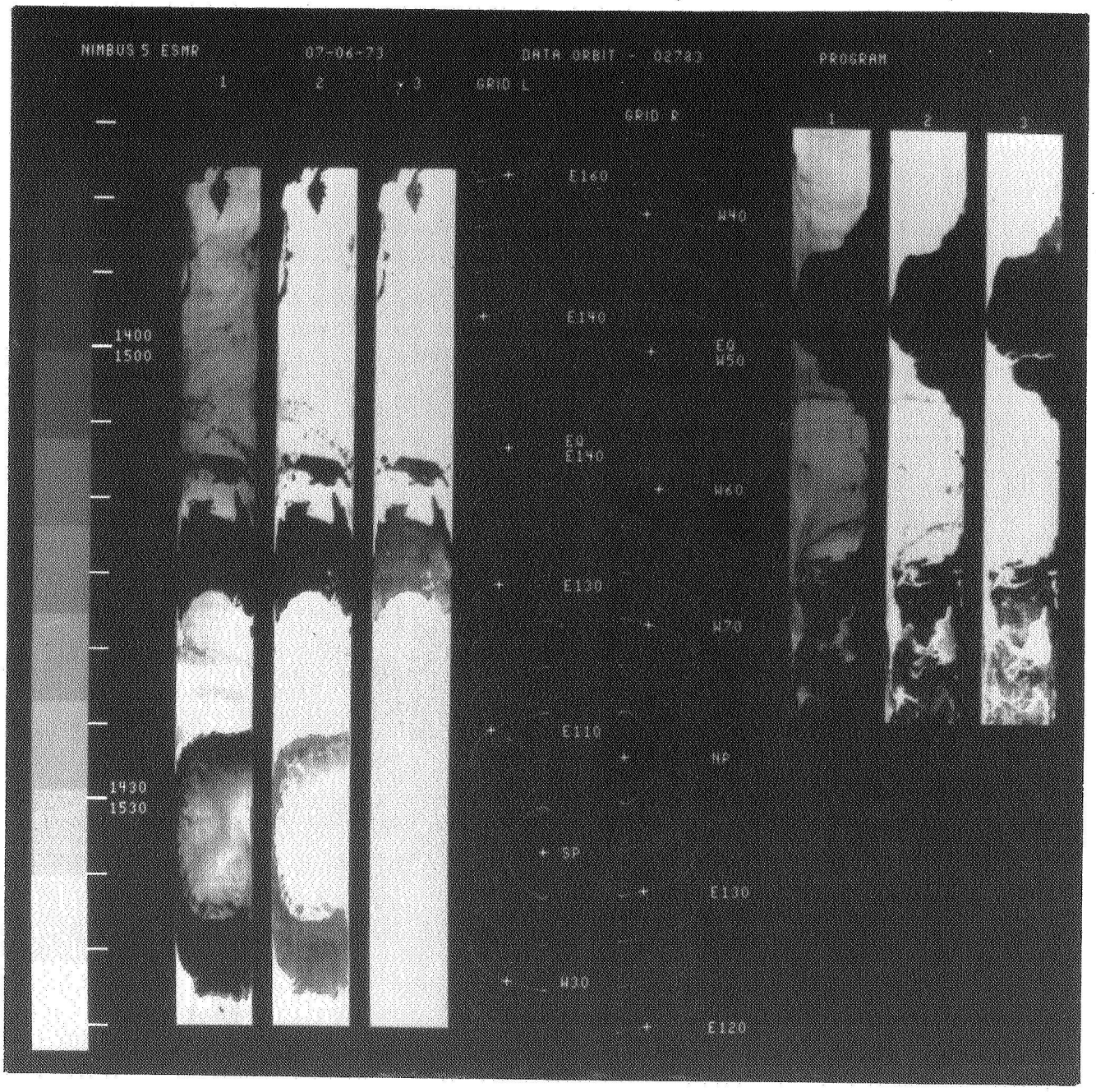

NIMBUS 5 ESMR
07-01-73
DATA ORBIT - 02716
PROGRAM
1
2
3
GRID L
GRID R
1400
1500
1430
1530
E150
W40
E140
EQ
W50
EQ
E130
W60
E120
W70
E110
NP
SP
E130
W30
E110

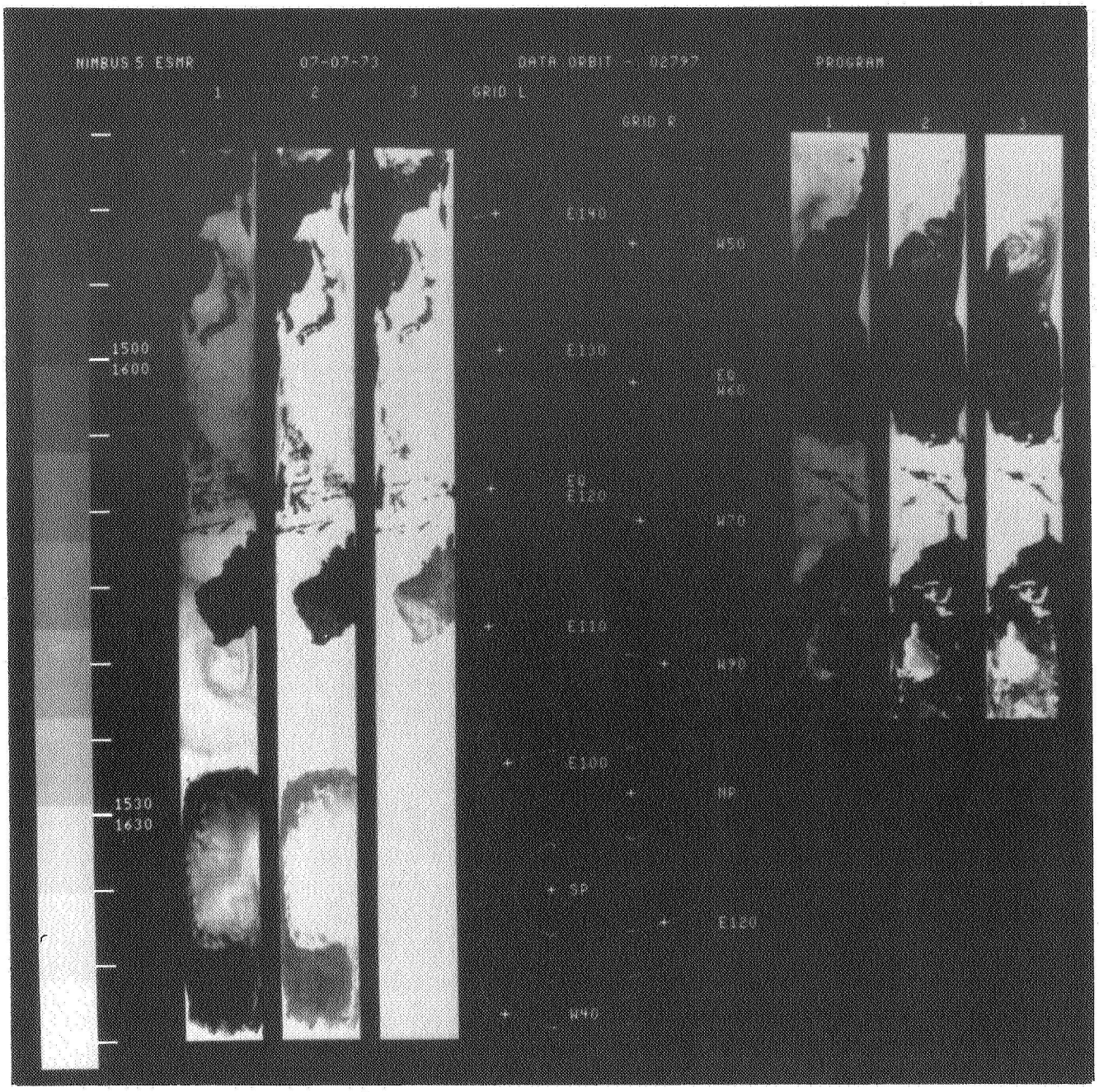

NIMBUS 5 ESMR
07-02-73
DATA ORBIT - 02724
PROGRAM
1
2
3
GRID L
GRID R
0430
0530
0500
0600
W70
EQ
E90
EQ
W80
E90
W90
E70
W100
NP
SP
W90
E120
W100
E100
EQ
W110

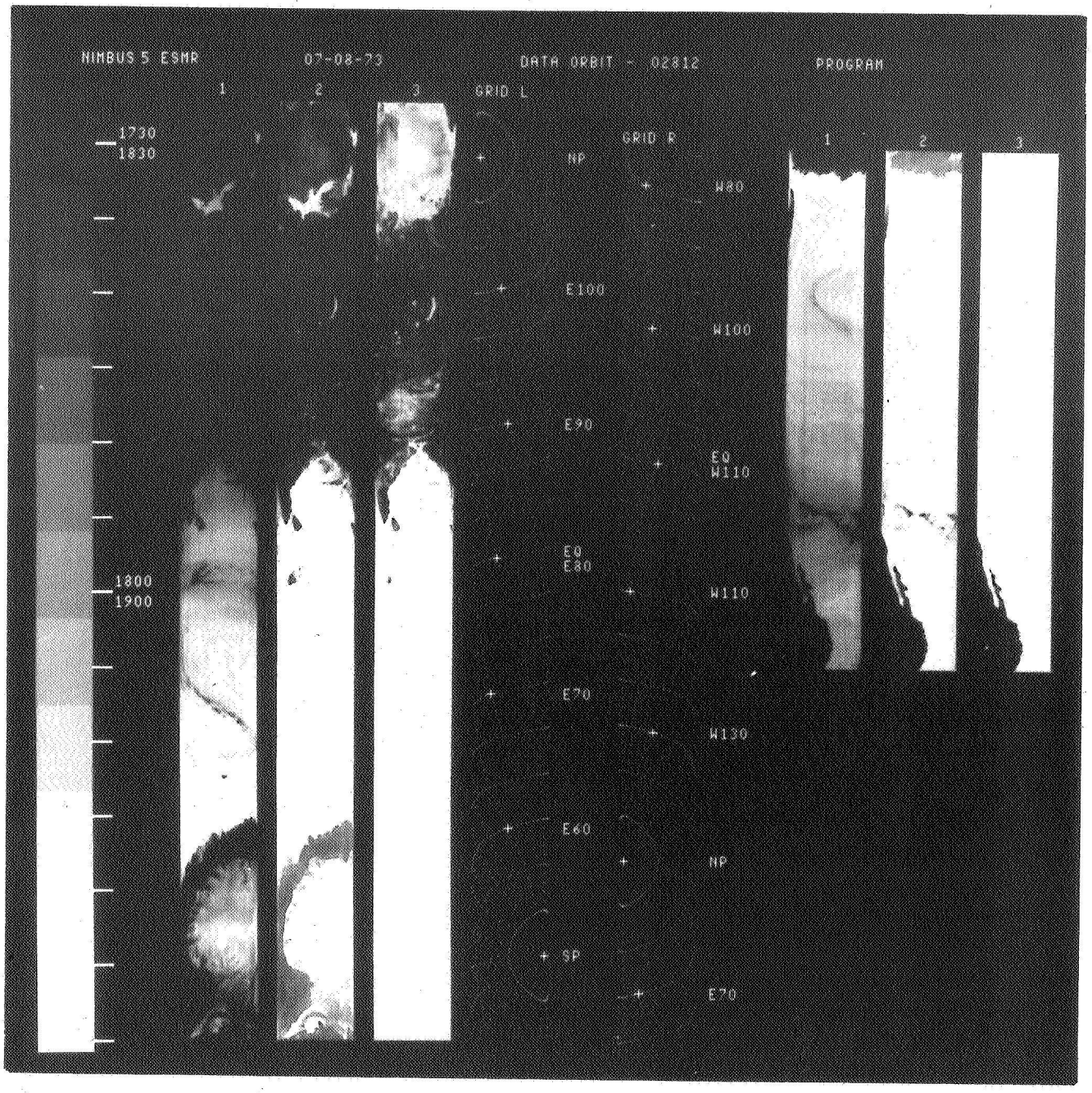

NIMBUS 5 ESMR
07-03-73
DATA ORBIT - 02743
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
E150
W50
E140
E0
W50
E0
E130
W60
E120
W30
E110
NP
SP
E120
W30
E110
1430
1530
1500
1600

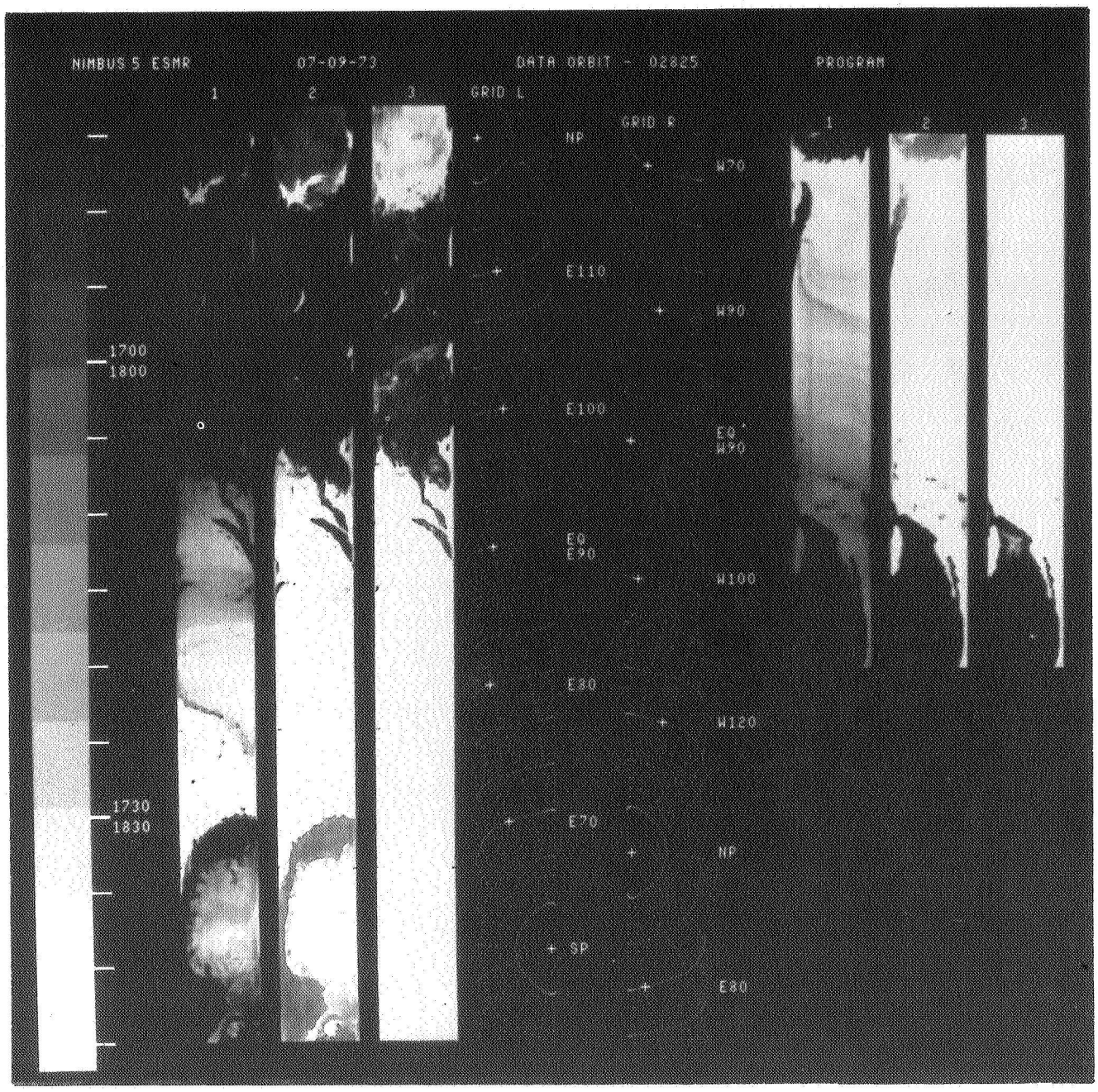

NIMBUS 5 ESMR
07-04-73
DATA ORBIT - 02756
PROGRAM
1
2
3
GRID L
GRID R
1330
1430
1400
1500
E160
W40
E150
EQ
W40
EQ
E140
W50
E130
W70
E120
NP
SP
E140
W20
E120

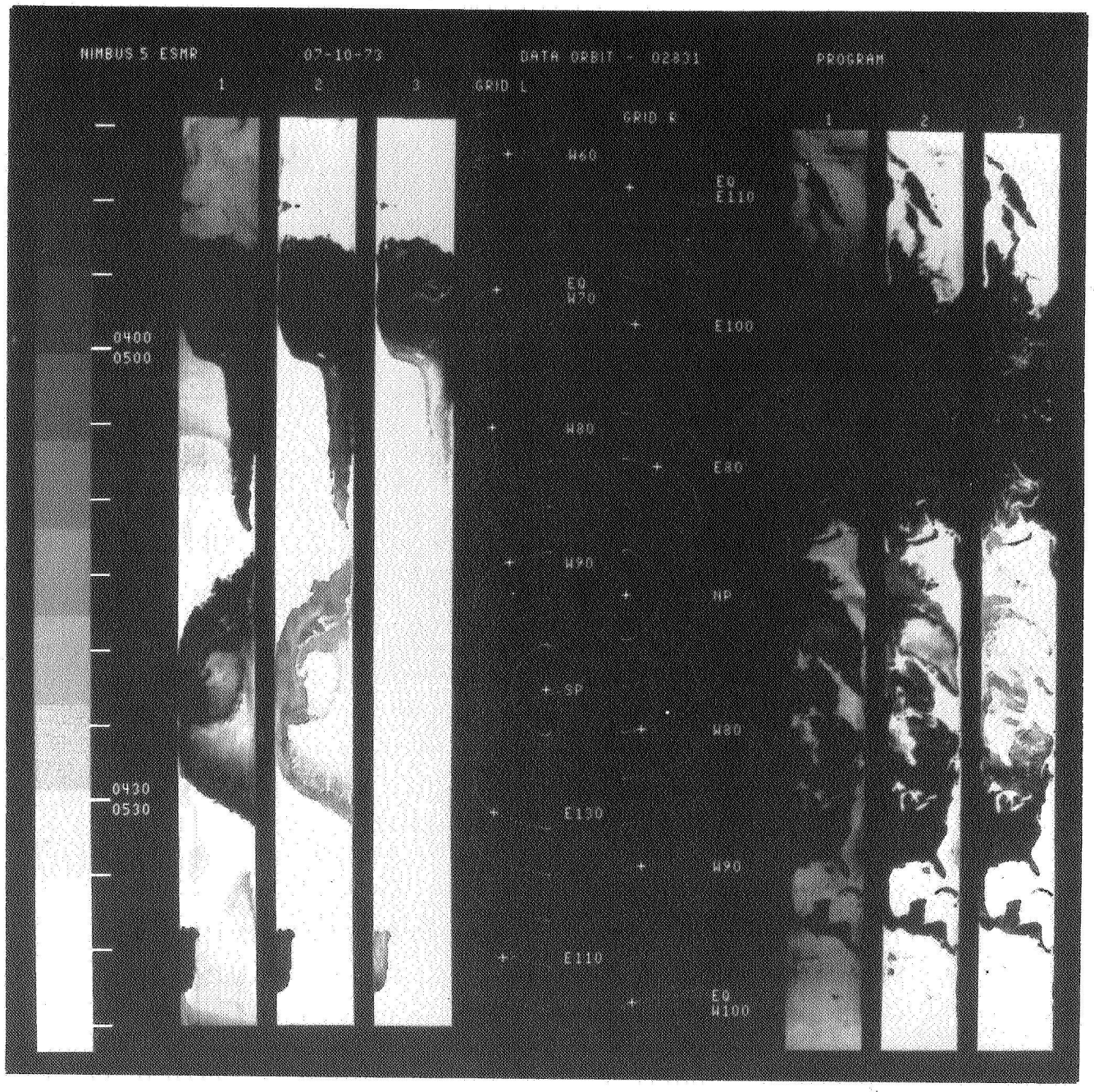

NIMBUS 5 ESMR
07-05-73
DATA ORBIT - 02771
PROGRAM
1
2
3
GRID L
NP
GRID R
1
2
3
E120
W80
E110
EQ
W70
EQ
E100
W90
E90
W110
E80
NP
SP
E90
W60
1630
1730
1700
1800

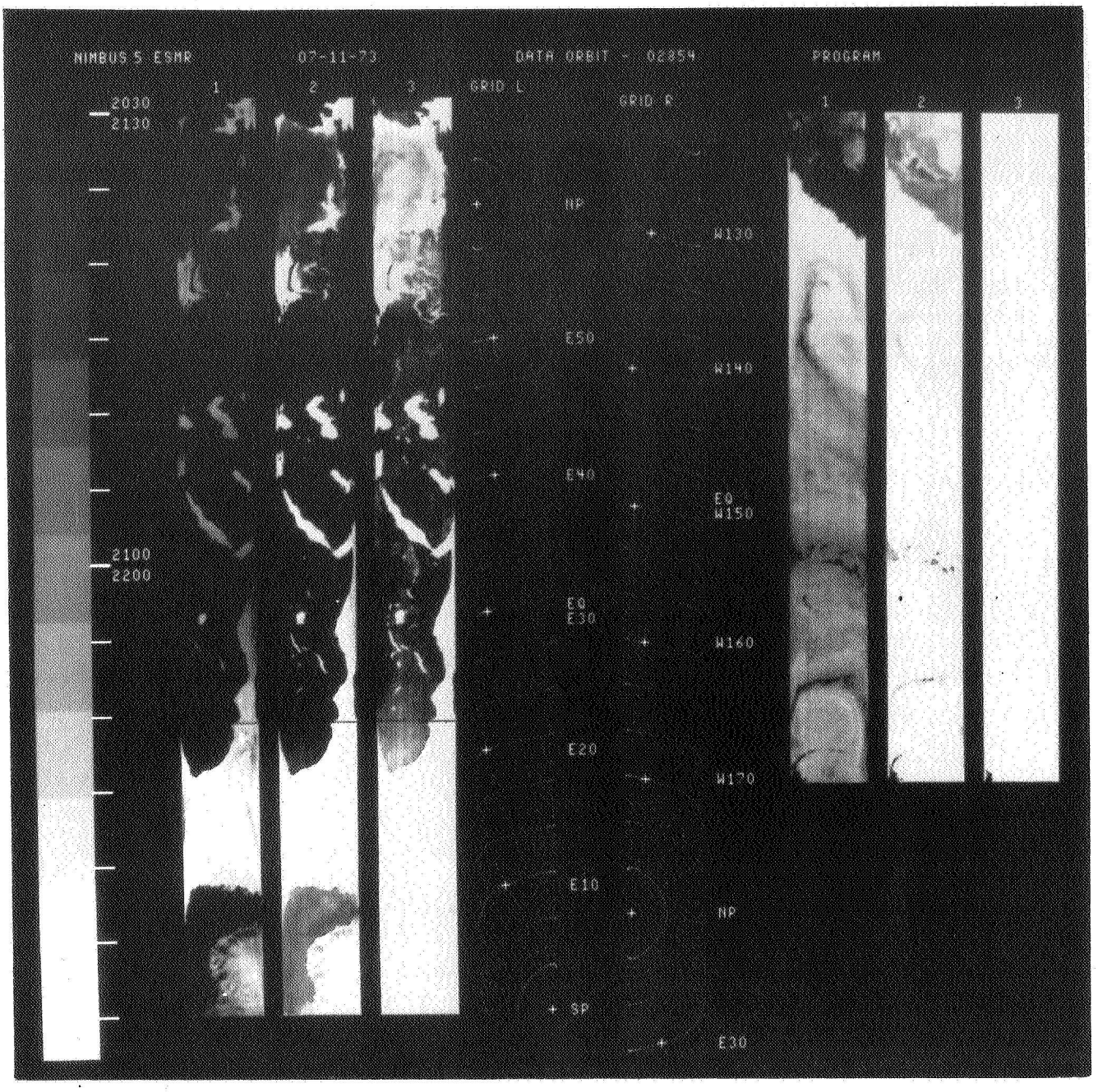

NIMBUS 5 ESMR
07-04-73
DATA ORBIT - 02743
PROGRAM
1
2
3
GRID L
GRID R
E140
W40
E140
EQ
W50
EQ
E140
W40
E130
W70
E110
NP
SP
E130
W30
E120
1400
1500
1430
1530

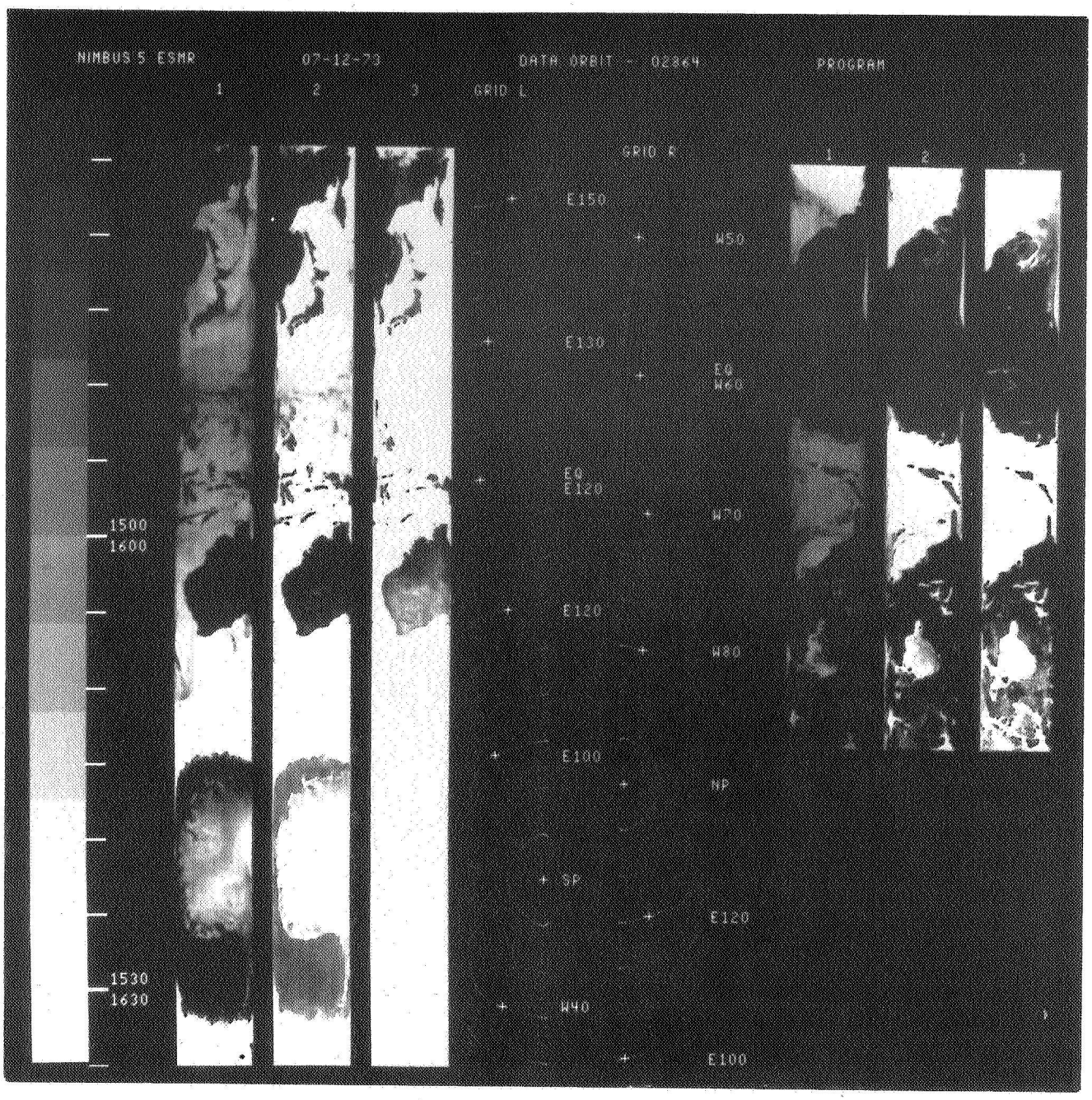

NIMBUS 5 ESMR
07-07-72
DATA ORBIT - 02797
PROGRAM
1
2
3
GRID L
GRID R
1500
1600
1530
1630
E140
N50
E130
N30
E120
N10
E110
NP0
E100
NP
SP
E180
N40

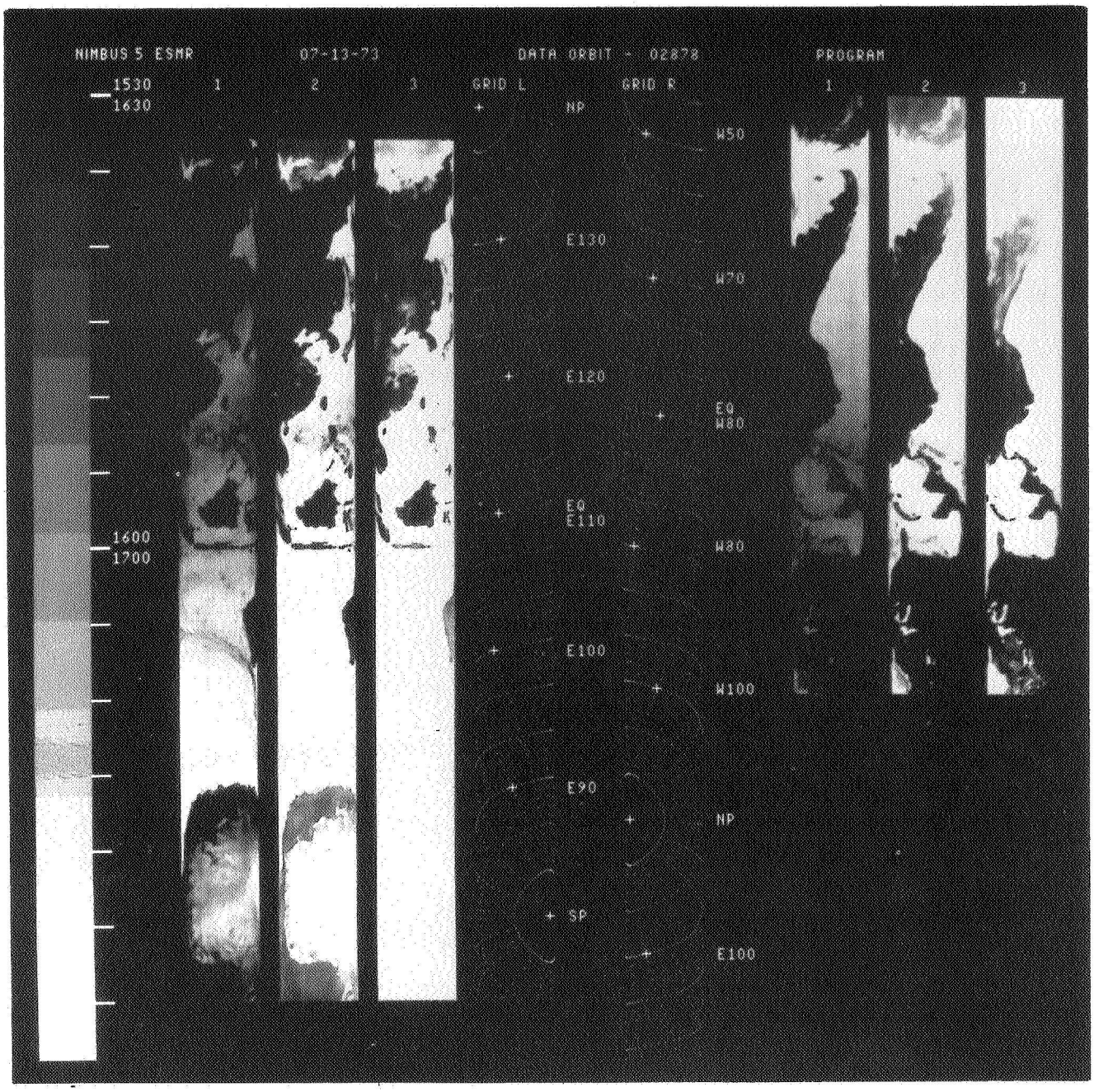

NIMBUS 5 ESMR
07-08-73
DATA ORBIT - 02812
PROGRAM
1
2
3
GRID L
GRID R
1730
1830
1800
1900
NP
W80
E100
W100
E90
EQ
W110
E80
W110
E70
W130
E60
NP
SP
E70

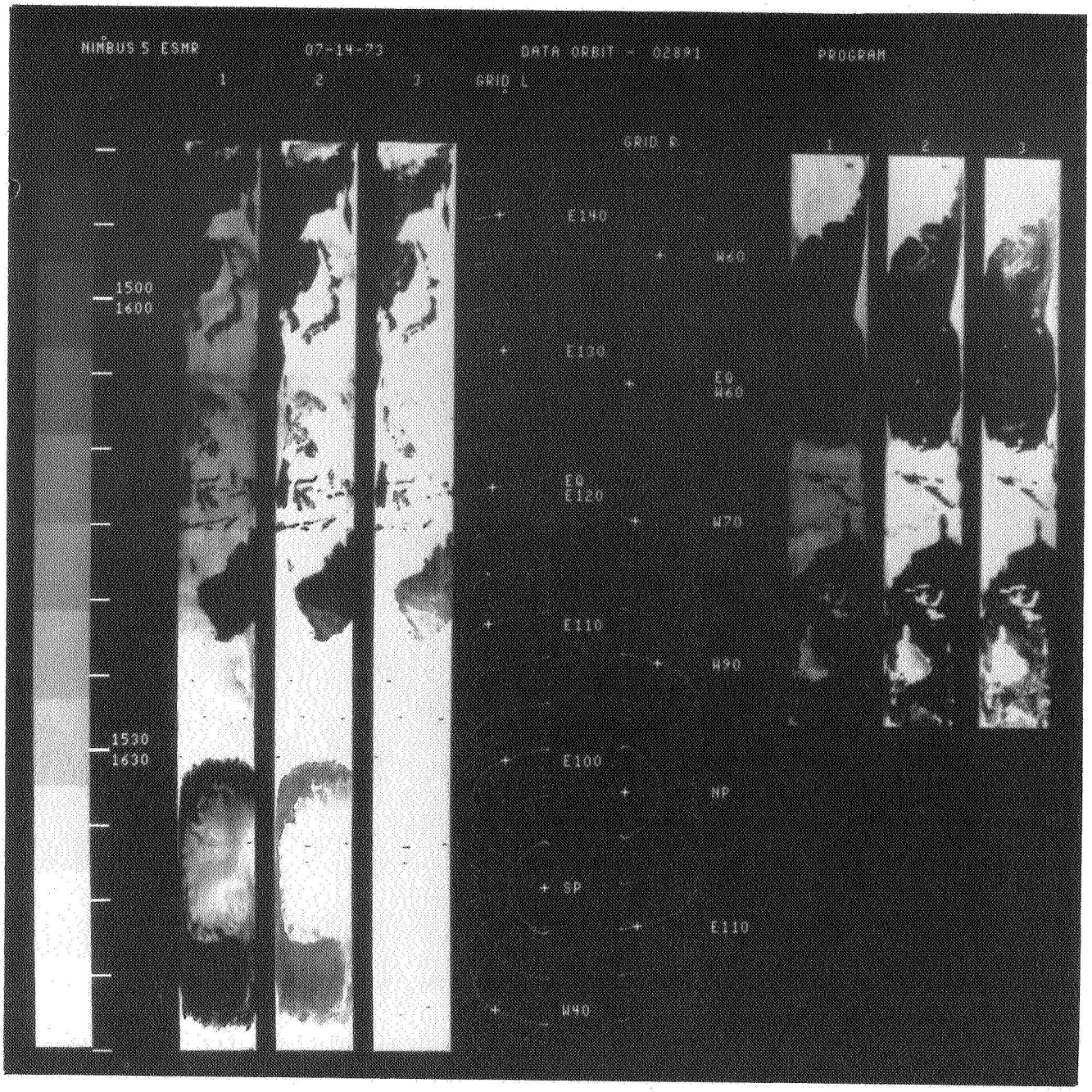

NIMBUS 5 ESMR
07-09-73
DATA ORBIT - 02825
PROGRAM
1
2
3
GRID L
GRID R
NP
W70
E110
W90
1700
1800
E100
EQ
W80
EQ
E90
W100
E80
W120
1730
1830
E70
NP
SP
E80

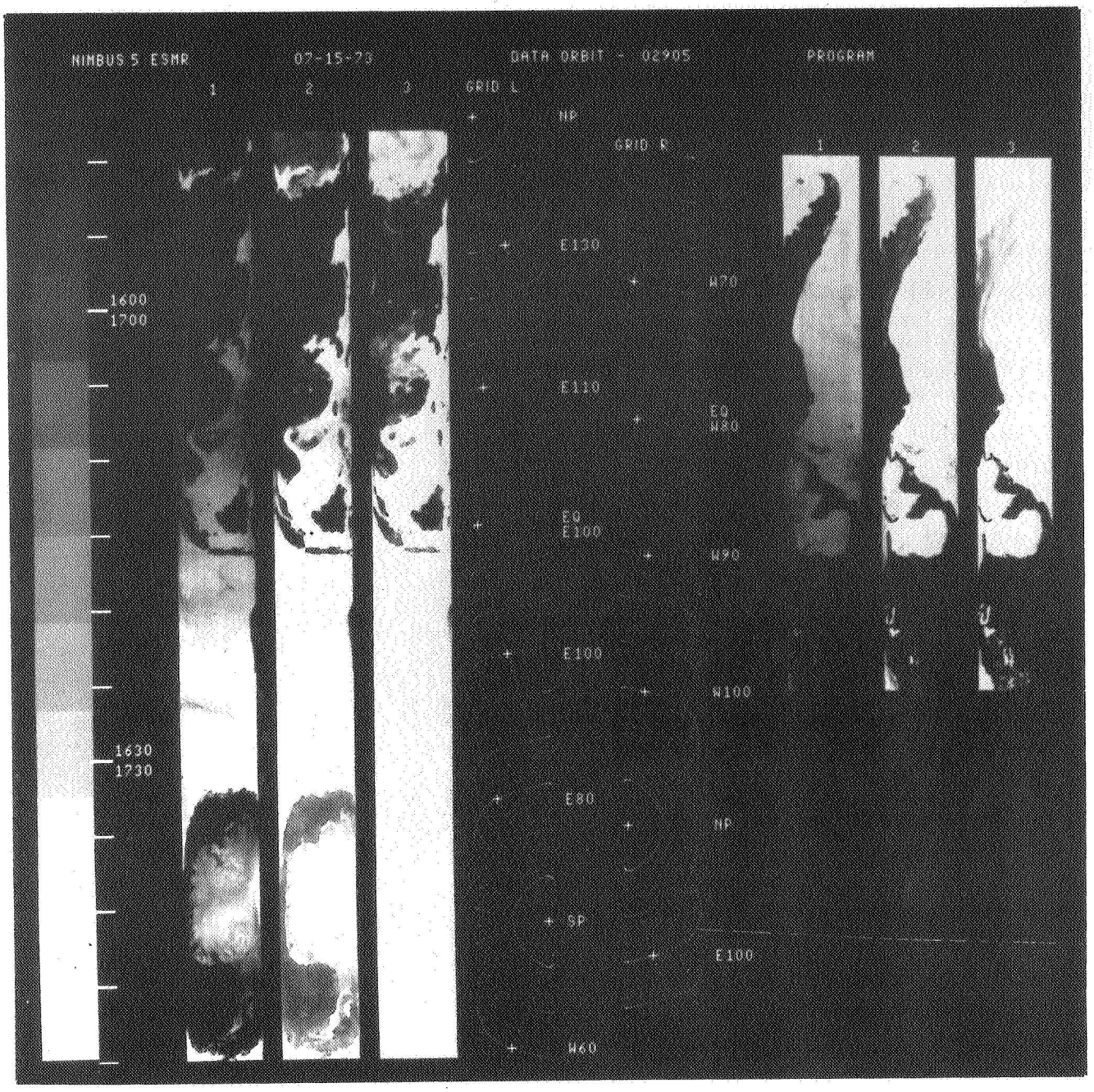

NIMBUS 5 ESMR
07-10-73
DATA ORBIT - 02831
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
W60
EQ
E110
EQ
W70
E100
W80
E80
W90
NP
SP
W80
E130
W70
E110
EQ
W100
0400
0500
0430
0530

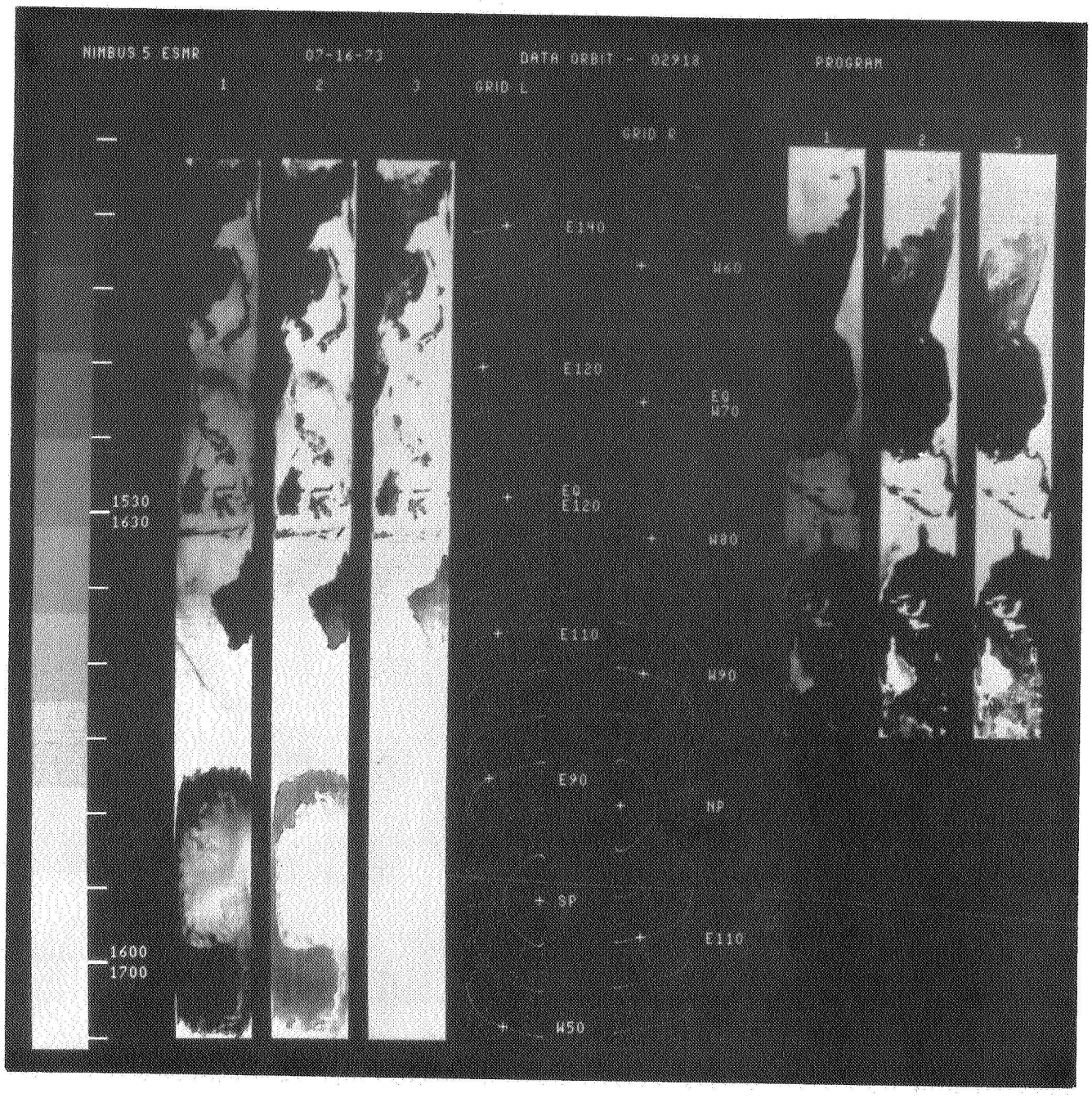

NIMBUS 5 ESMR
07-11-73
DATA ORBIT - 02854
PROGRAM
1
2
3
GRID L
GRID R
2030
2130
2100
2200
NP
W120
E50
W140
E40
EQ
W150
EQ
E30
W160
E20
W170
E10
NP
SP
E30

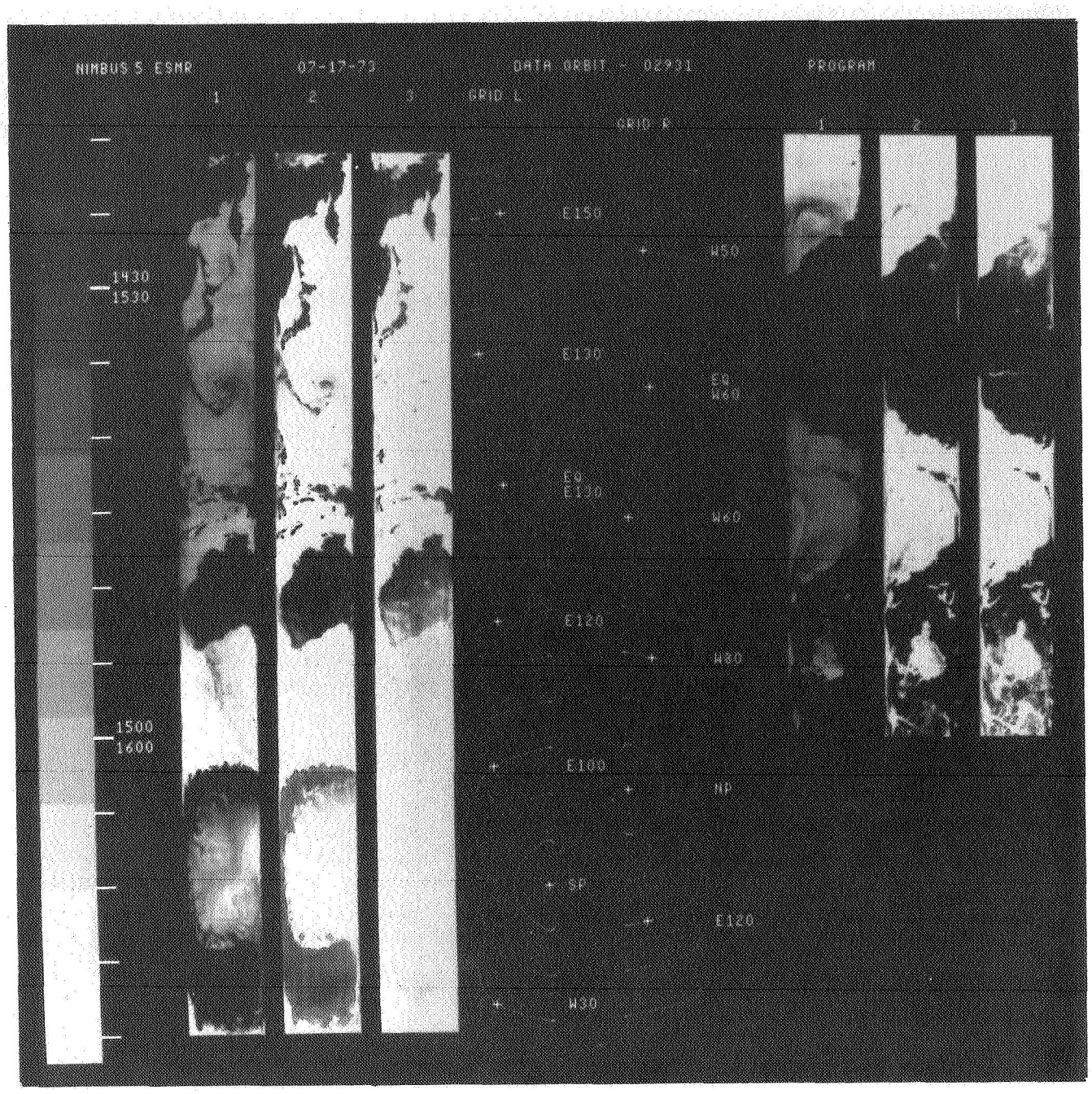

NIMBUS 5 ESMR
07-12-73
DATA ORBIT - 02864
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
E150
W50
E130
E0
W40
E0
E120
W30
E120
W80
E100
NP
SP
E120
W40
E100
1500
1600
1530
1630

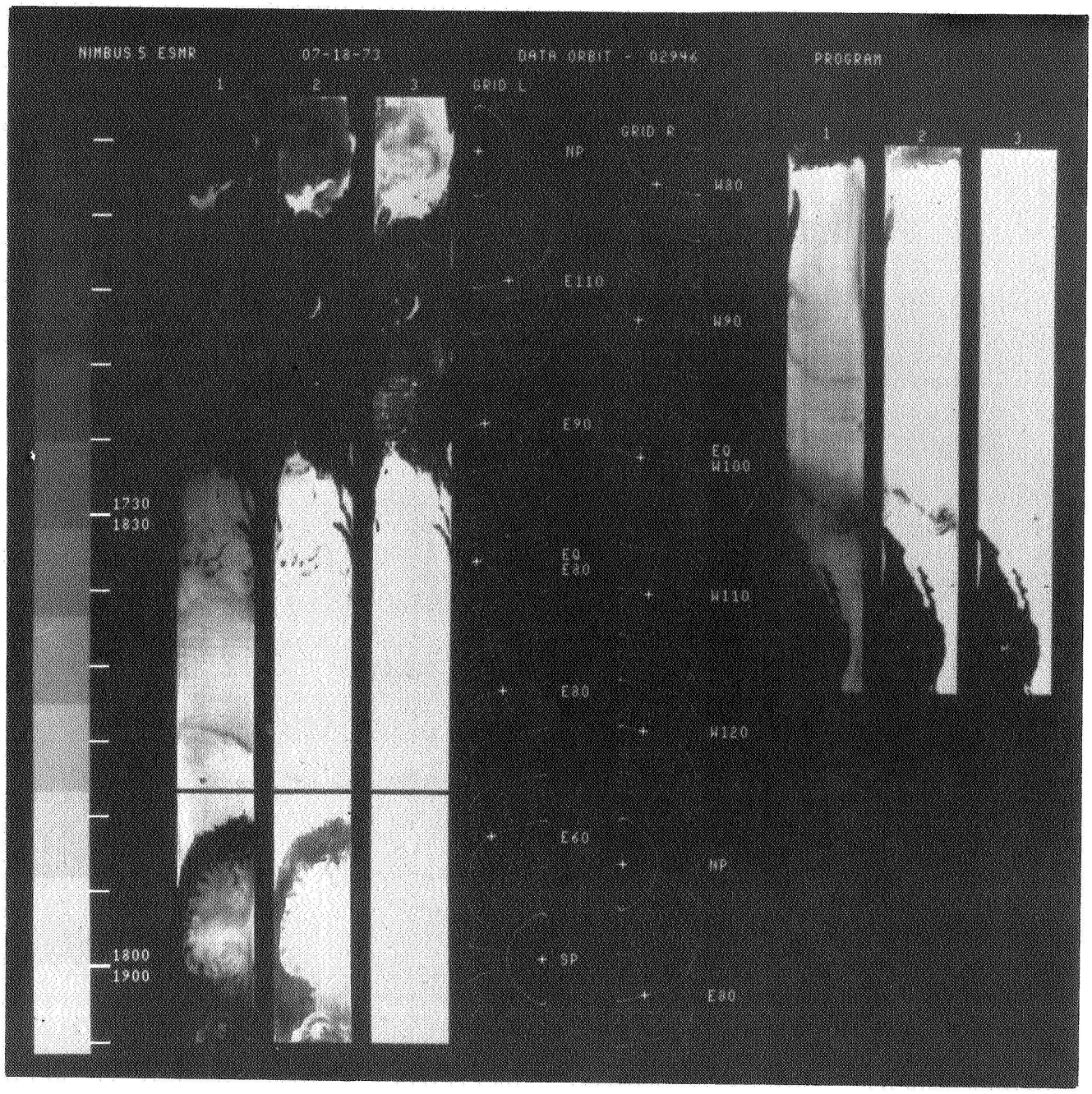

NIMBUS 5 ESMR
07-13-73
DATA ORBIT - 02878
PROGRAM
1530
1630
1600
1700
1
2
3
GRID L
GRID R
NP
W50
E130
W70
E120
EQ
W80
EQ
E110
W80
E100
W100
E90
NP
SP
E100


NIMBUS 5 ESMR
07-14-73
DATA ORBIT - 02891
PROGRAM
1
2
3
GRID L
GRID R
1500
1600
1530
1630
E140
W60
E130
EQ
W60
EQ
E120
W70
E110
W90
E100
NP
SP
E110
W40

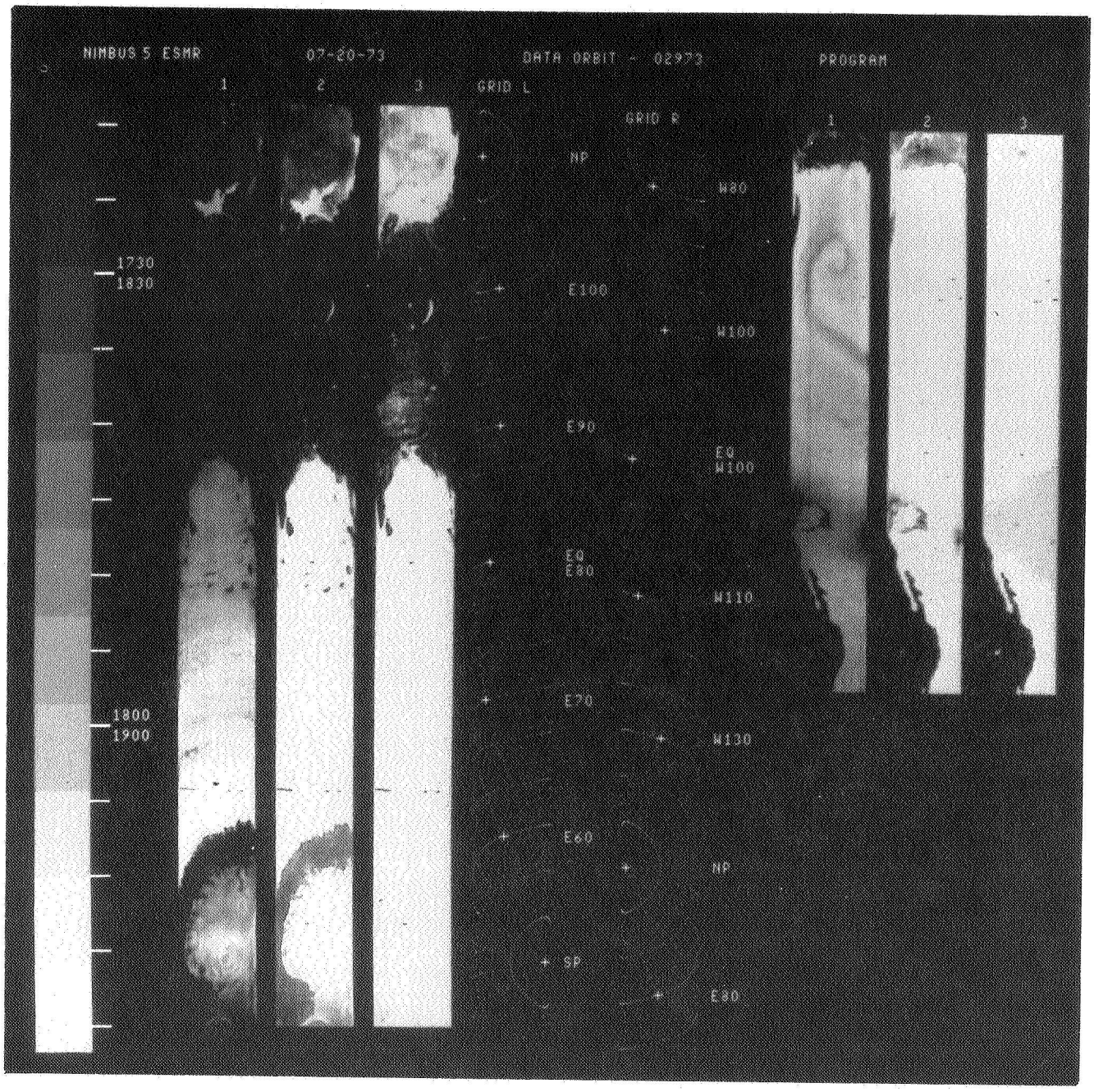

NIMBUS 5 ESMR
07-15-73
DATA ORBIT - 02905
PROGRAM
1
2
3
GRID L
NP
GRID R
1
2
3
E130
W70
E110
E0
W30
E0
E100
W90
E100
W100
1600
1700
1630
1730
E80
NP
SP
E100
W60

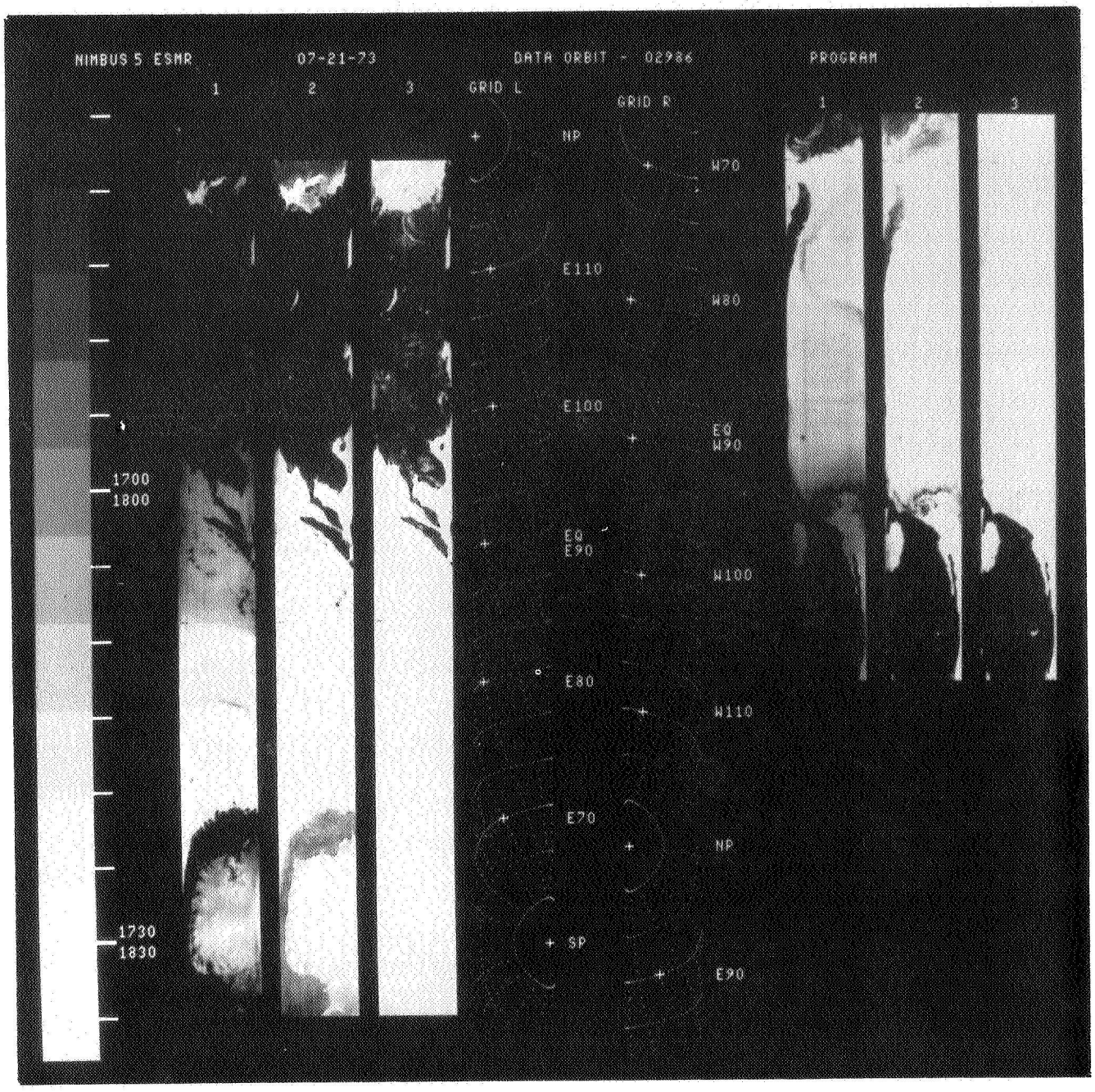

NIMBUS 5 ESMR
07-14-73
DATA ORBIT - 02913
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
E140
W40
E120
EQ
W70
EQ
E120
W90
E110
W90
E90
NP
SP
E110
W50
1530
1630
1600
1700

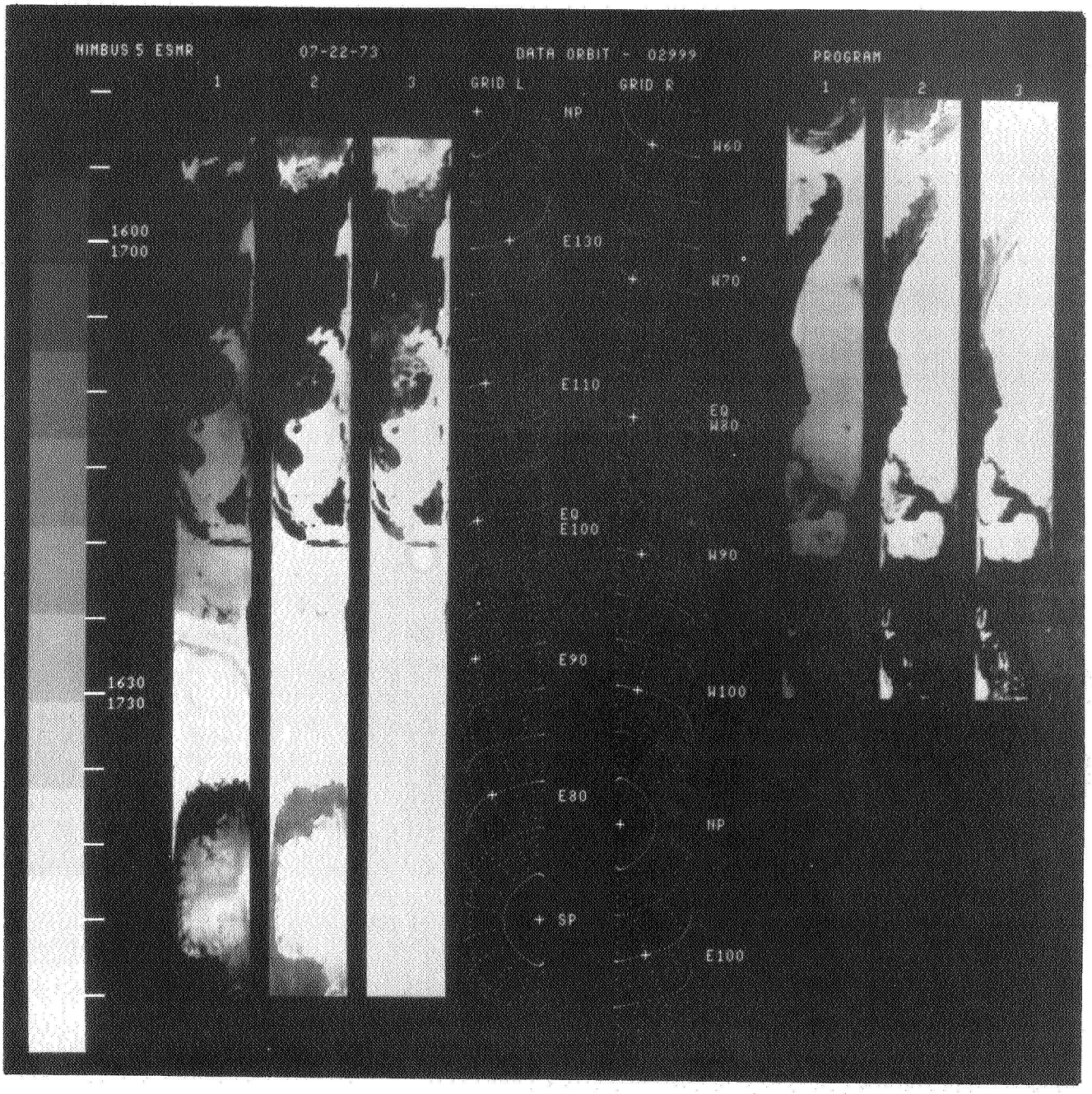

NIMBUS 5 ESMR
07-17-73
DATA ORBIT - 02431
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
E150
W50
1430
1530
E120
EQ
W20
EQ
E120
W60
E120
W80
1500
1600
E100
NP
SP
E120
W30

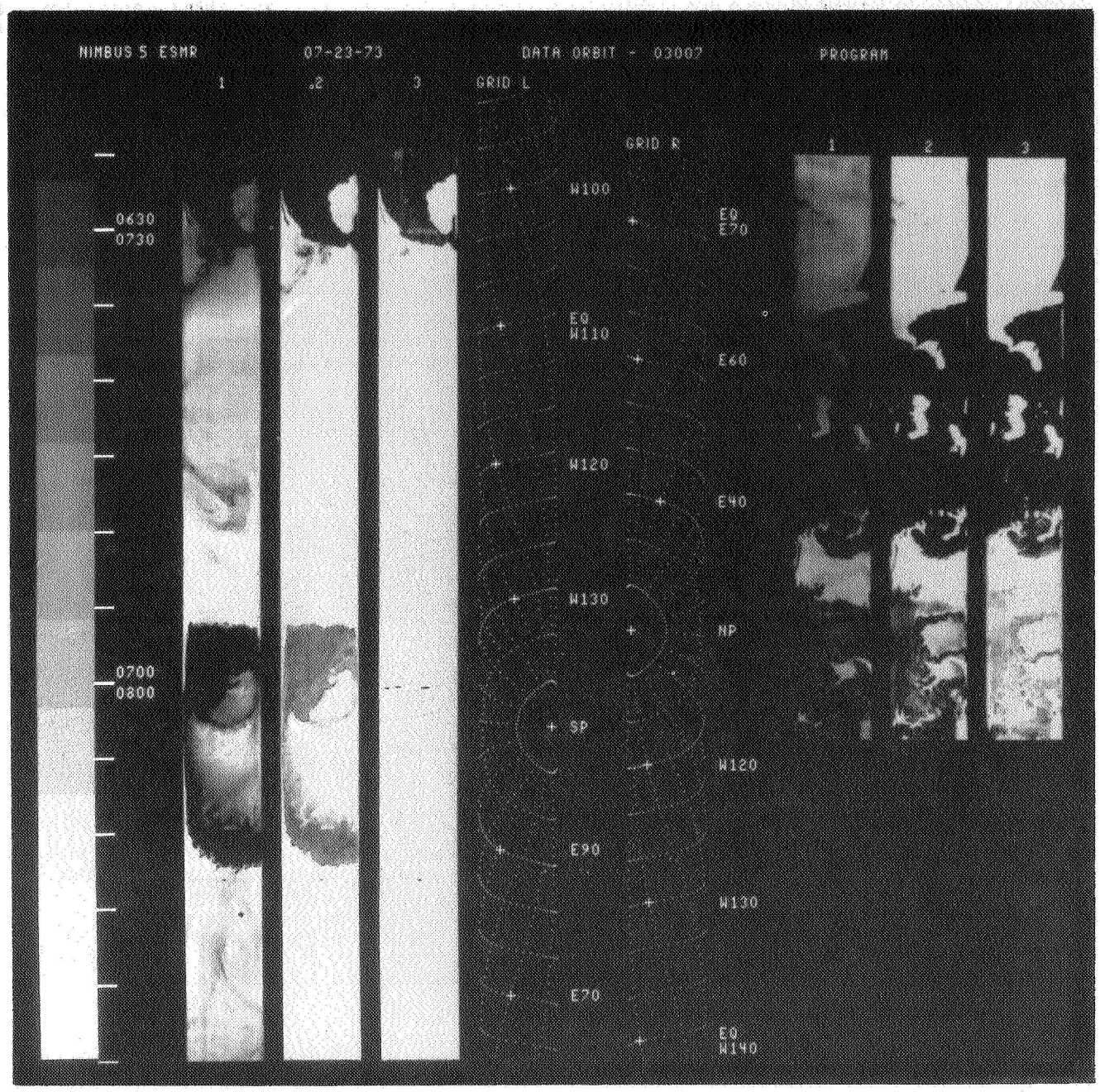

NIMBUS 5 ESMR
07-18-73
DATA ORBIT - 02946
PROGRAM
1
2
3
GRID L
GRID R
NP
W30
E110
W90
E90
EQ
W100
1730
1830
EQ
E80
W110
E80
W120
E60
NP
1800
1900
SP
E40

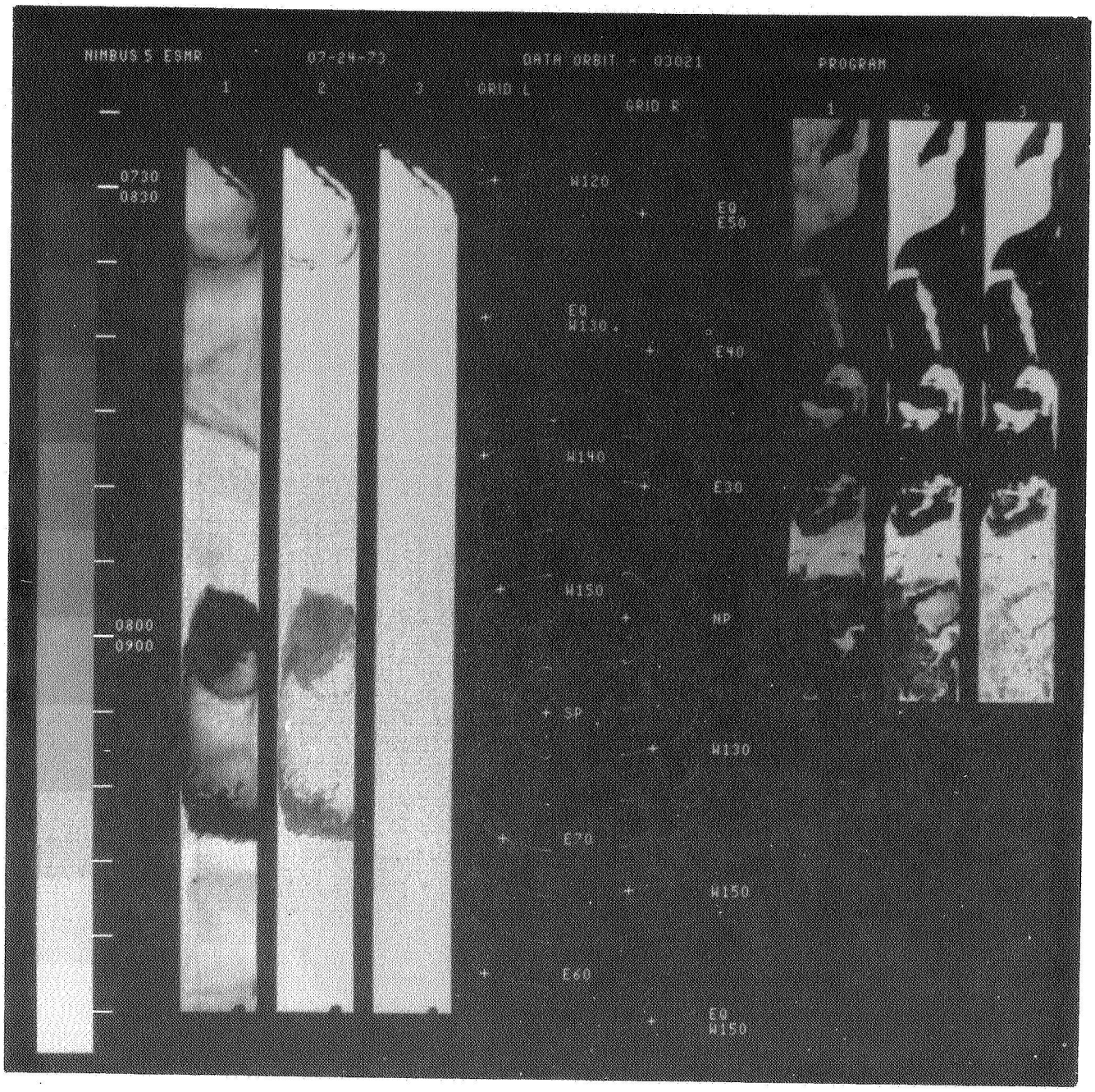

NIMBUS 5 ESMR
07-19-73
DATA ORBIT - 02960
PROGRAM
1
2
3
GRID L
GRID R
1
2
3
NP
W90
E90
W110
E80
EQ
W110
1830
1930
EQ
E70
W120
E60
W140
E50
NP
1900
2000
SP
E60

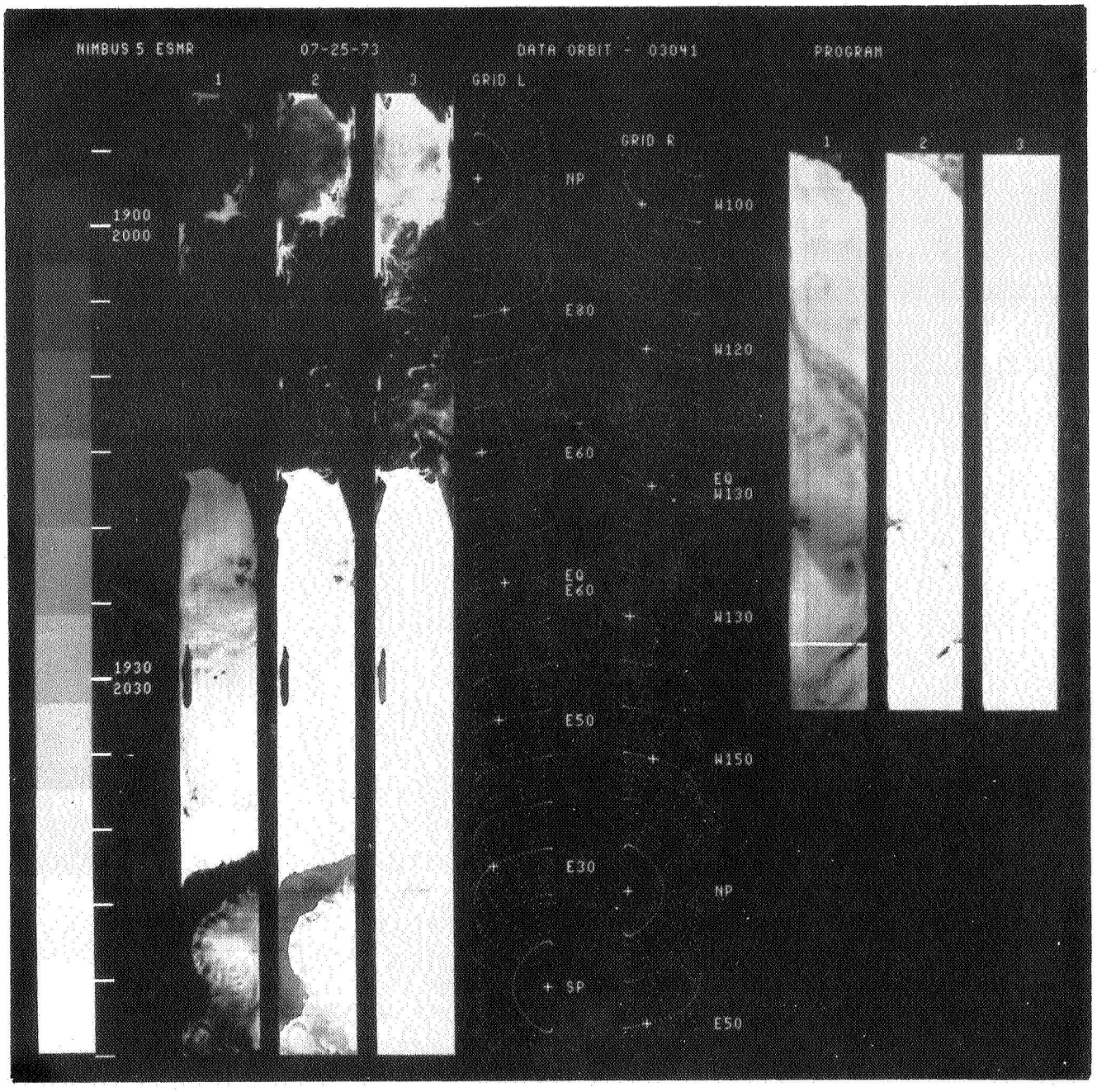

NIMBUS 5 ESMR
07-20-73
DATA ORBIT - 02972
PROGRAM
1
2
3
GRID L
GRID P
NP
W80
1730
1830
E100
W100
E90
EQ
W100
EQ
E80
W110
1800
1900
E70
W130
E60
NP
SP
E80

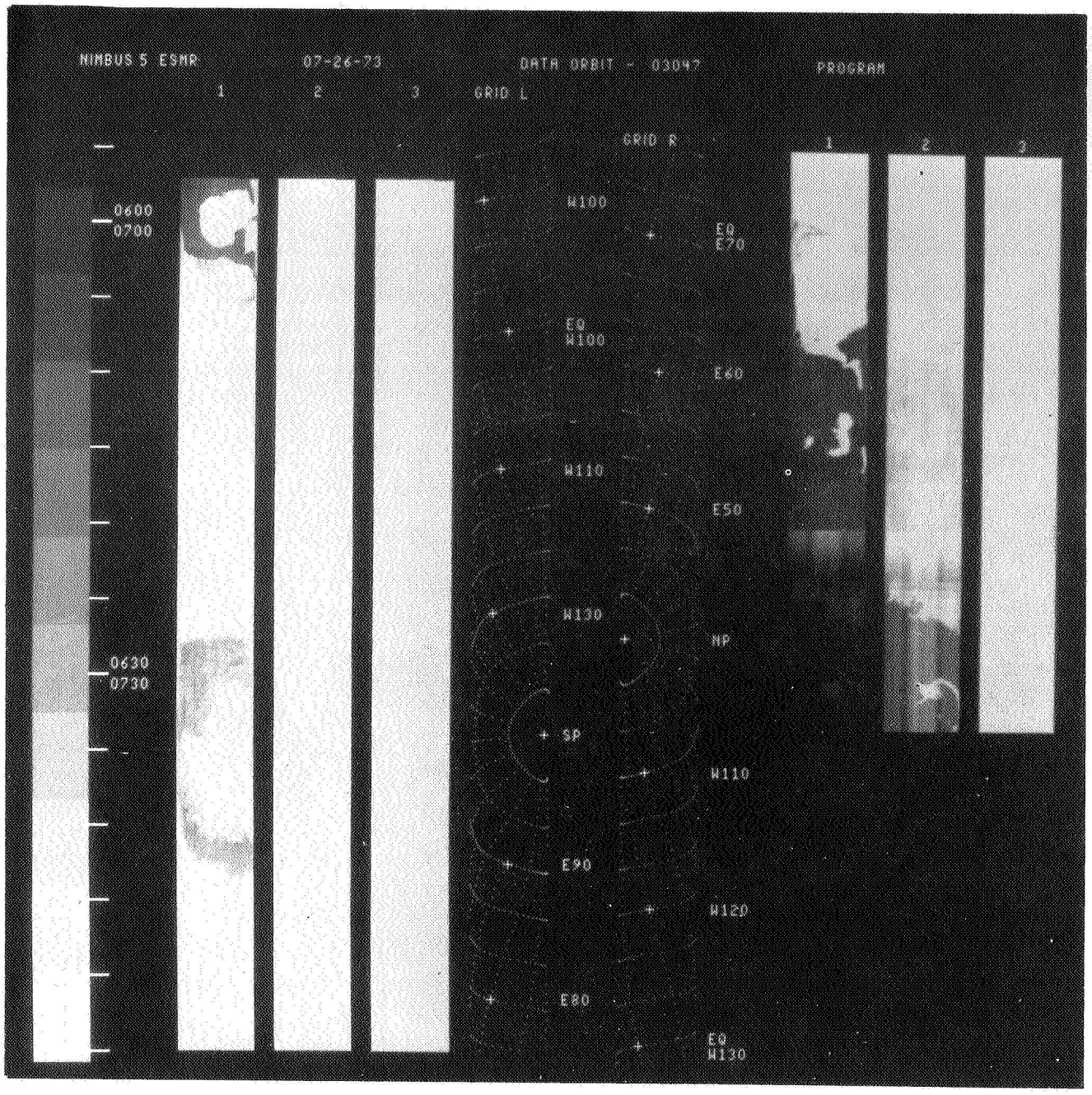

NIMBUS 5 ESMR
07-21-73
DATA ORBIT - 02986
PROGRAM
1
2
3
GRID L
GRID R
NP
W70
E110
W80
E100
EQ
W90
1700
1800
EQ
E90
W100
E80
W110
E70
NP
1730
1830
SP
E90

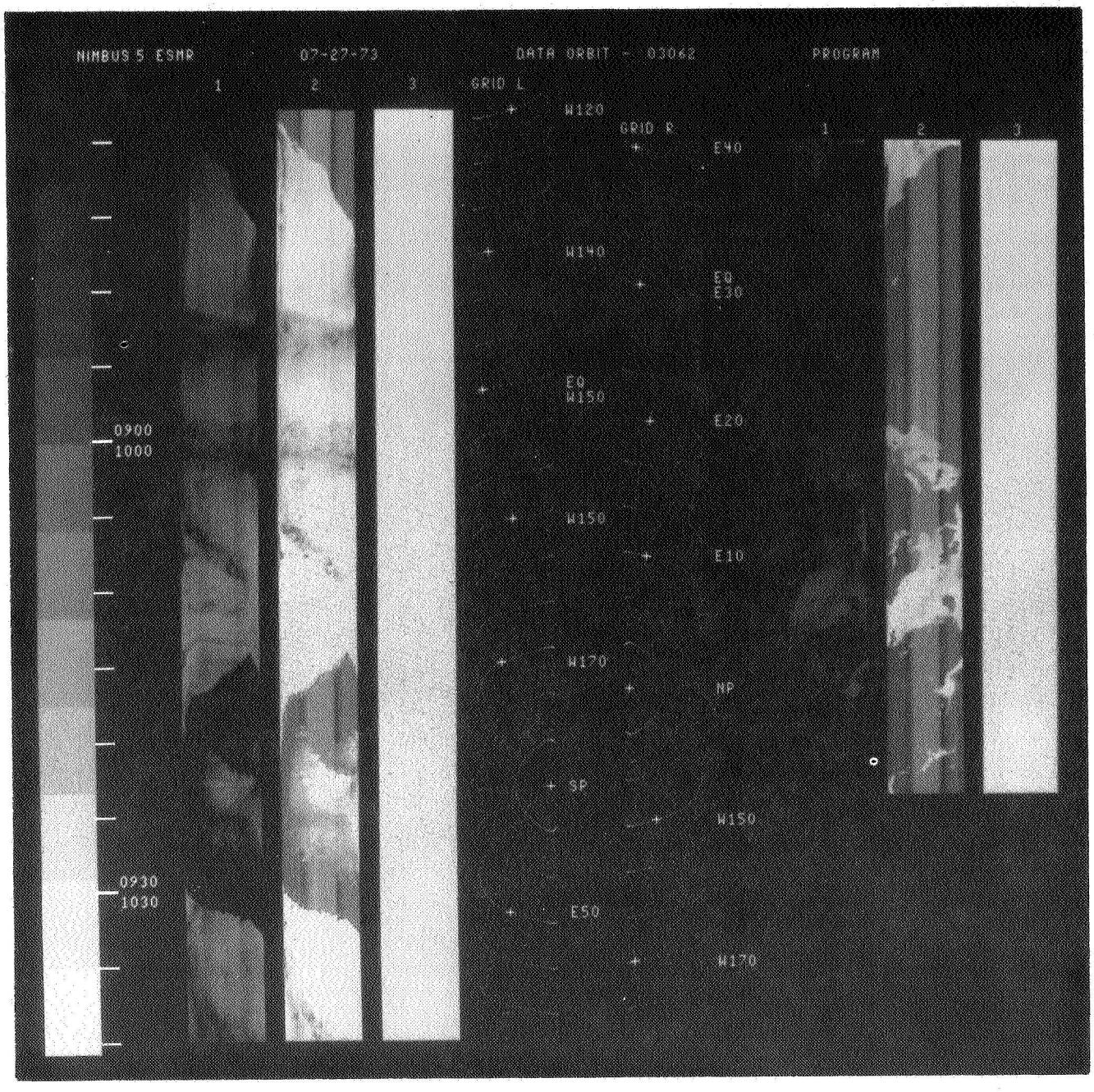

NIMBUS 5 ESMR
07-22-73
DATA ORBIT - 02999
PROGRAM
1
2
3
GRID L
GRID R
NP
W60
E130
W70
E110
EQ
W80
EQ
E100
W90
E90
W100
E80
NP
SP
E100
1600
1700
1630
1730

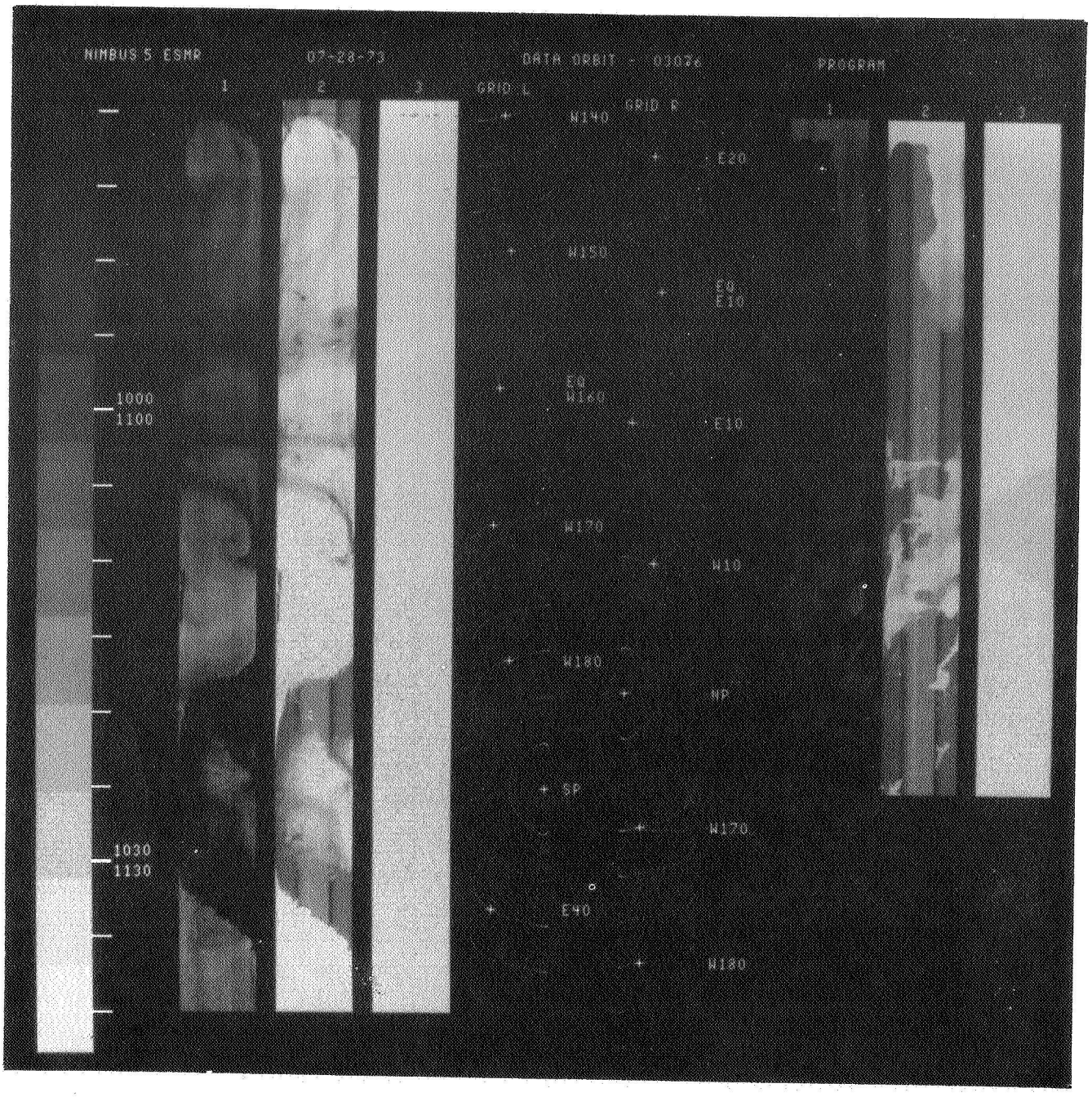

NIMBUS 5 ESMR
07-23-73
DATA ORBIT - 03007
PROGRAM
1
2
3
GRID L
GRID R
0630
0730
0700
0800
W100
EQ
E70
EQ
W110
E60
W120
E40
W130
NP
SP
W120
E90
W130
E70
EQ
W140


NIMBUS 5 ESMR
07-24-72
DATA ORBIT - 03021
PROGRAM
1
2
3
GRID L
GRID R
0730
0830
0800
0900
W120
EQ
E30
EQ
W130
E40
W140
E30
W150
NP
SP
W130
E70
W150
E60
EQ
W150

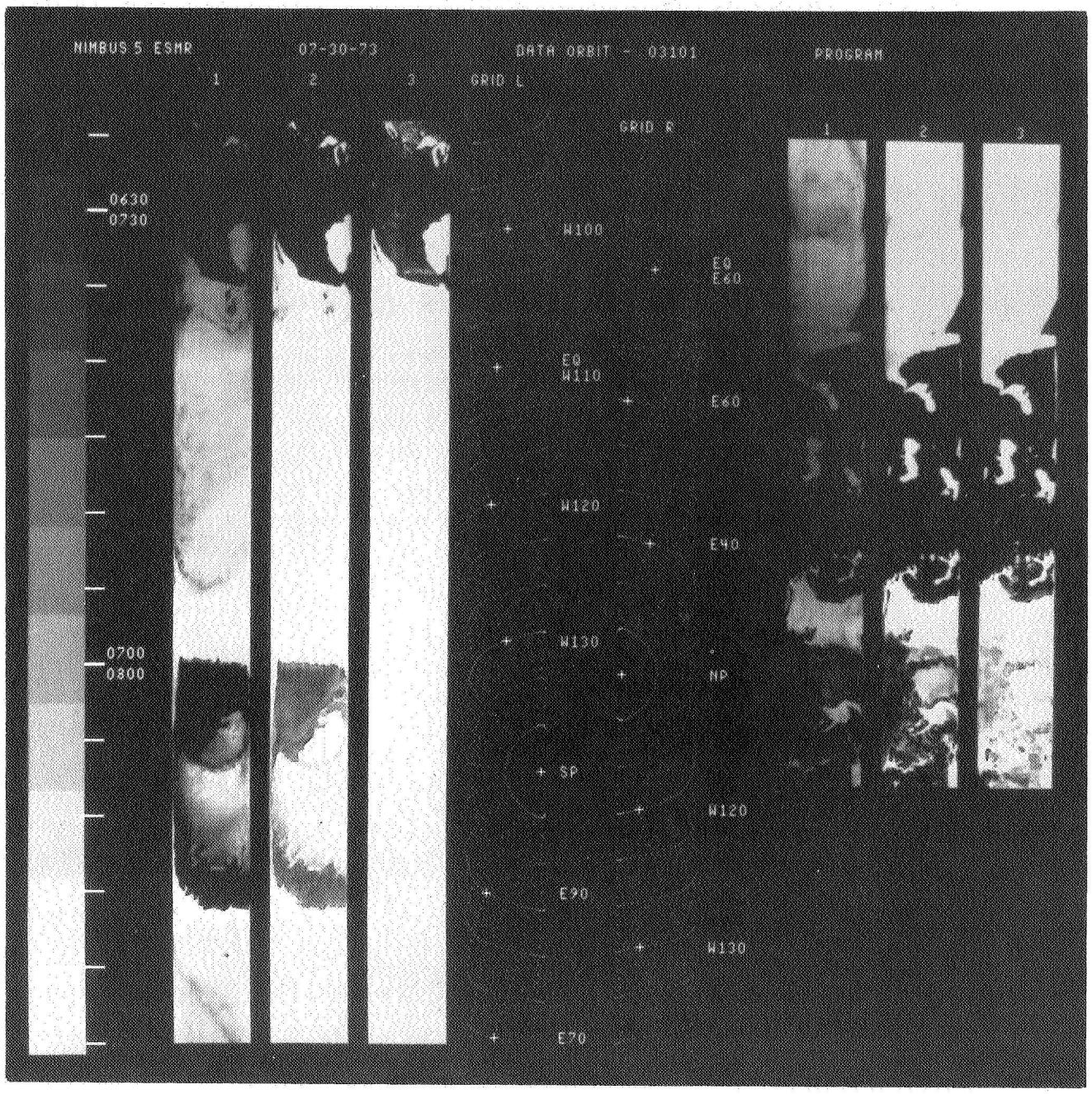

NIMBUS 5 ESMR
07-25-73
DATA ORBIT - 03041
PROGRAM
1
2
3
GRID L
GRID R
1900
2000
1930
2030
NP
W100
E80
W120
E60
EQ
W130
EQ
E60
W130
E50
W150
E30
NP
SP
E50

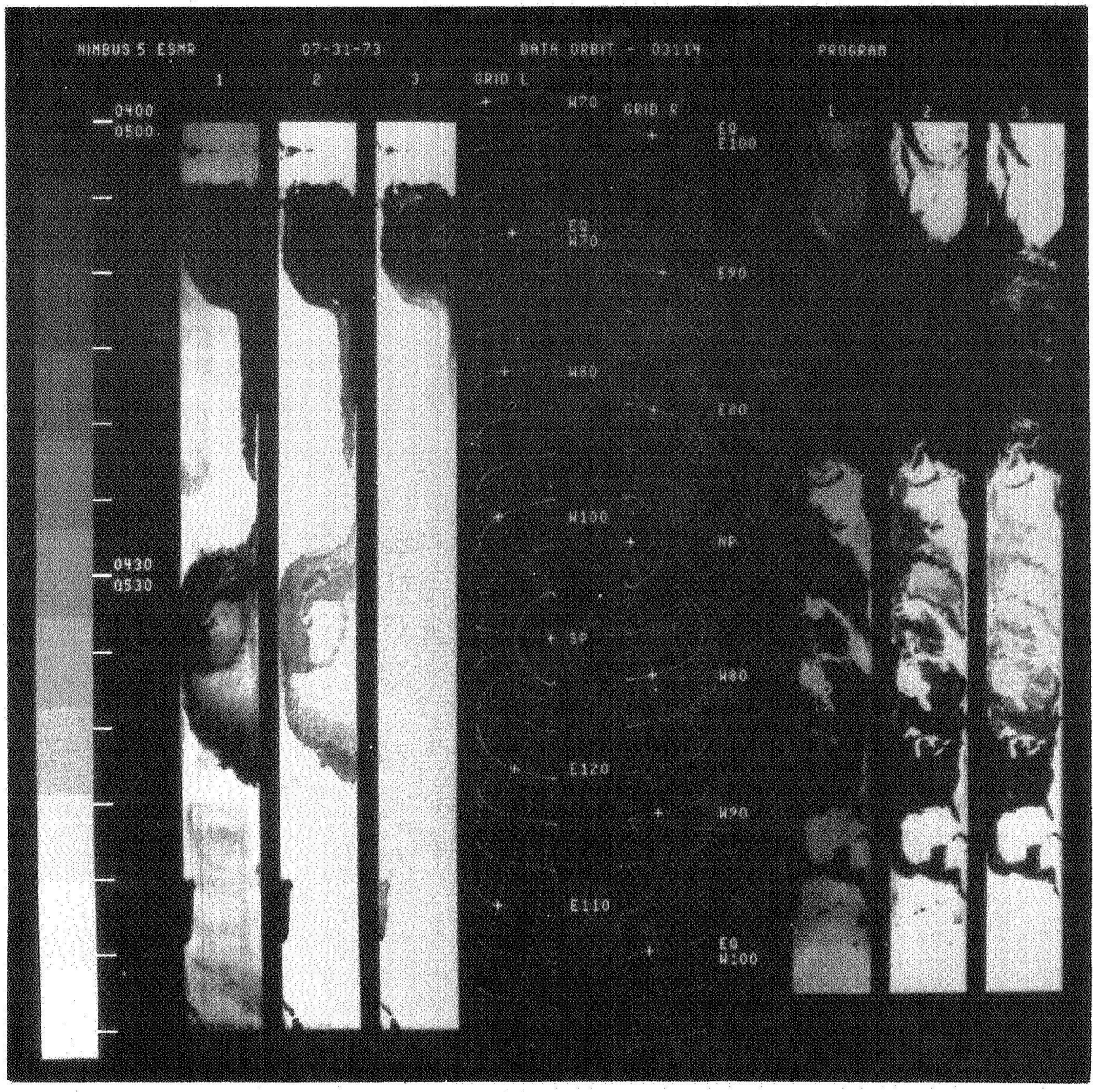

NIMBUS 5 ESMR
07-24-73
DATA ORBIT - 03047
PROGRAM
1
2
3
GRID L
GRID R
0600
0700
0630
0730
W100
EQ
E70
EQ
W100
E60
W110
E50
W130
NP
SP
W110
E90
W120
E80
EQ
W130


NIMBUS 5 ESMR
07-27-73
DATA ORBIT - 03062
PROGRAM
1
2
3
GRID L
W120
GRID R
E40
W140
EQ
E30
EQ
W150
E20
W150
E10
W170
NP
SP
W150
E50
W170
0900
1000
0930
1030


NIMBUS 5 ESMR
07-28-73
DATA ORBIT - 03026
PROGRAM
1
2
3
GRID L
GRID F
W140
E20
W150
E0
E10
1000
1100
EQ
W160
E10
W170
W10
W180
NP
SP
W170
1030
1130
E40
W130


NIMBUS 5 ESMR
07-29-73
DATA ORBIT - 03088
PROGRAM
1
2
3
GRID L
GRID R
W100
E60
W120
EQ
E50
EQ
W120
E40
W130
E30
W150
NP
SP
W130
E70
W140
0730
0830
0800
0900


NIMBUS 5 ESMR
07-30-73
DATA ORBIT - 03101
PROGRAM
1
2
3
GRID L
GRID R
0630
0730
0700
0800
W100
E0
E60
E0
W110
E60
W120
E40
W130
NP
SP
W120
E90
W130
E70


NIMBUS 5 ESMR
07-31-73
DATA ORBIT - 03114
PROGRAM
1
2
3
GRID L
GRID R
0400
0500
0430
0530
W70
EQ
E100
EQ
W70
E90
W80
E80
W100
NP
SP
W80
E120
W90
E110
EQ
W100

SECTION 4

TEMPERATURE HUMIDITY INFRARED RADIOMETER MONTAGES

This section pictorially documents the data from the Temperature Humidity Infrared Radiometer subsystem carried on the Nimbus 5 Meteorological Satellite. Section 4.1 contains all nighttime THIR 11.5 and 6.7 micrometer montages and Section 4.2 contains all daytime THIR 11.5 and 6.7 micrometer montages, arranged in chronological order. Key latitudes can be read from the superposed grids. Grid points are identified where each swath crosses 60° N, 30° N, EQUATOR, 30° S, and 60° S.

Vellum Location Guide overlays, attached to the back of this document, may be used for general orientation with the data presented in each THIR montage. Proper alignment of the overlay grid is accomplished by matching the grid indices on the equator with the two "T" marks on each montage.

Each THIR montage is provided with a time scale to determine the Greenwich Mean Time limits required to order processed THIR grid print maps (see page 38, The Nimbus 5 User's Guide). The time scale is used to determine the number of minutes from ascending (daytime data) or descending (nighttime data) node time for the interval of data required. To obtain the GMT for daytime data, the measured time is to be added to the ascending node time in the northern hemisphere and subtracted in the southern hemisphere. For nighttime data, the measured time is to be subtracted from the descending node time in the northern hemisphere and added in the southern hemisphere. The ascending and descending node times are given in Table 2-2 of Section 2.

The following alternate procedure also establishes GMT limits. Knowing the latitude limits of the study area, the minutes from ascending or descending node can be directly interpolated from Table 4-1. These time values can then be added to or subtracted from node times given in Table 2-2 of Section 2.

A description of the THIR experiment and instructions for ordering THIR data may be found in The Nimbus 5 User's Guide, Section 2.

Table 4-1

Latitude Versus Minutes From
Ascending or Descending Node

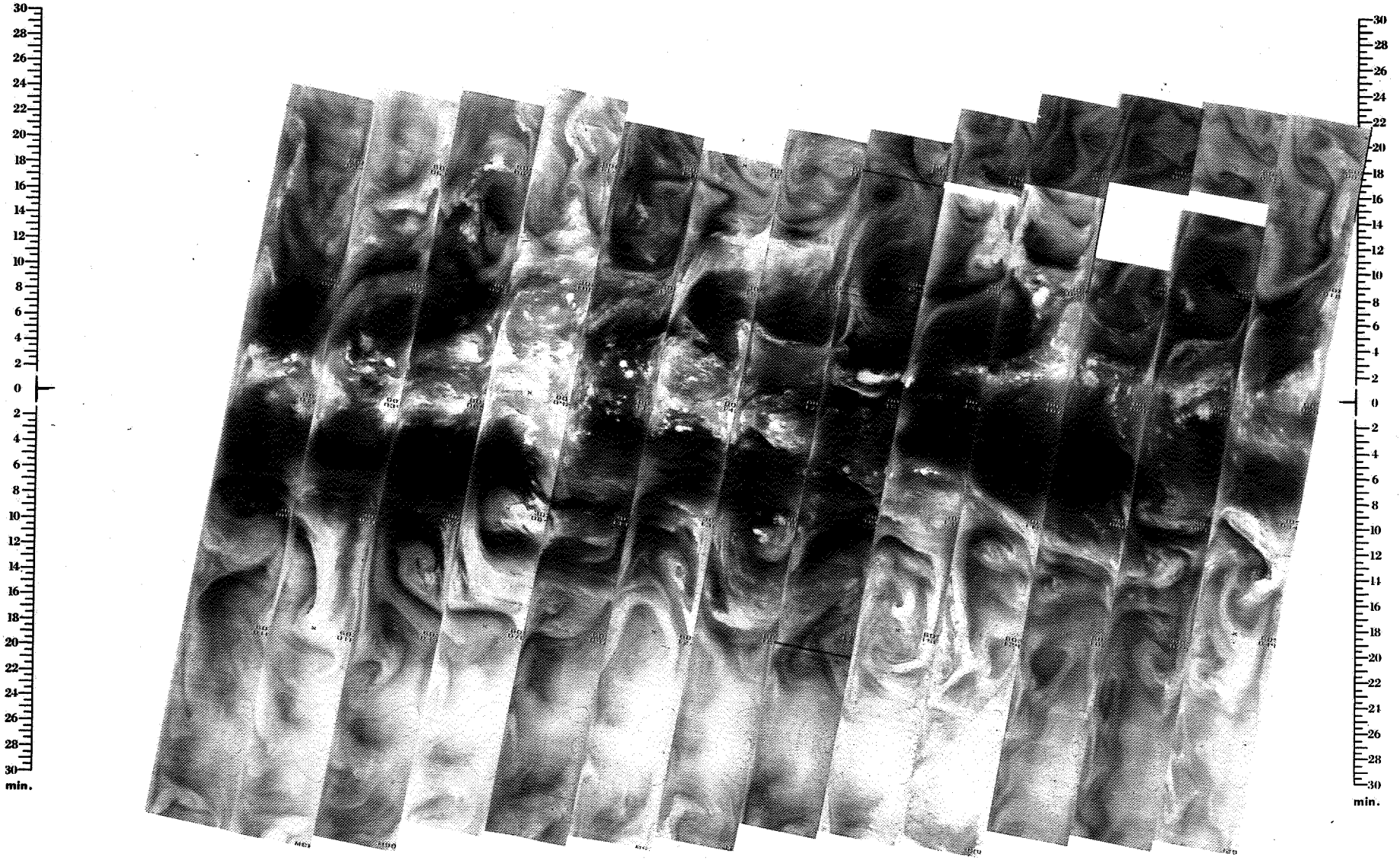
Latitude from AN or DN	Minutes and Seconds from AN or DN
0	0:00
5	1:31
10	3:02
15	4:33
20	6:03
25	7:34
30	9:05
35	10:36
40	12:08
45	13:40
50	15:12
55	16:44
60	18:18
65	19:52
70	21:33
75	23:26
78	24:44
80.1	26:49
78	29:00
75	30:09
70	31:51
65	33:35

SECTION 4.1
TEMPERATURE HUMIDITY INFRARED RADIOMETER NIGHTTIME MONTAGES



1 JUNE 1973

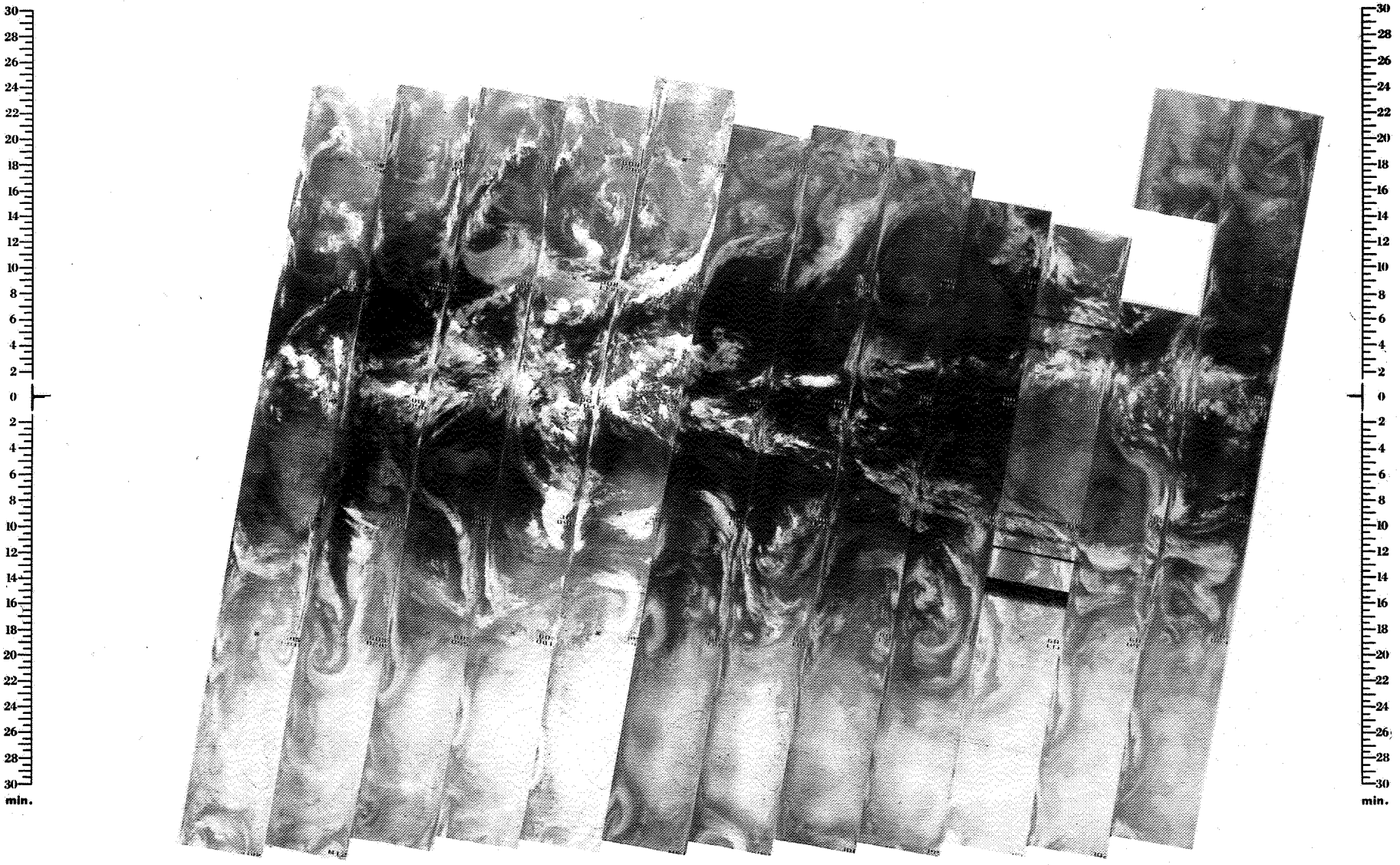
11.5 μm



2318 2317 2316 2315 2314 2313 2312 2311 2310 2309 2308 2307 2306 2305

1 JUNE 1973

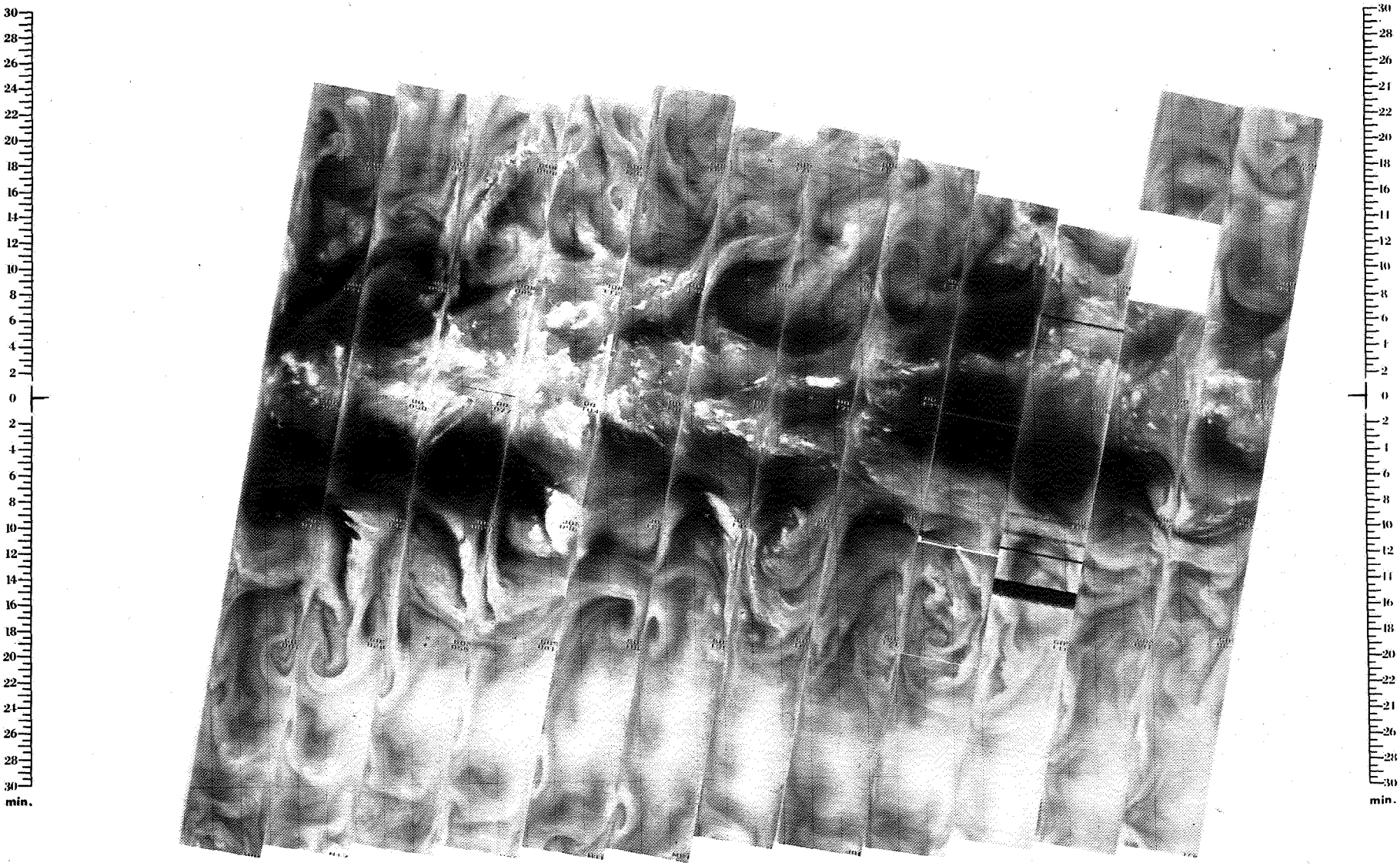
6.7 μm



2331 2330 2329 2328 2327 2326 2325 2324 2323 2322 2321 2320 2319

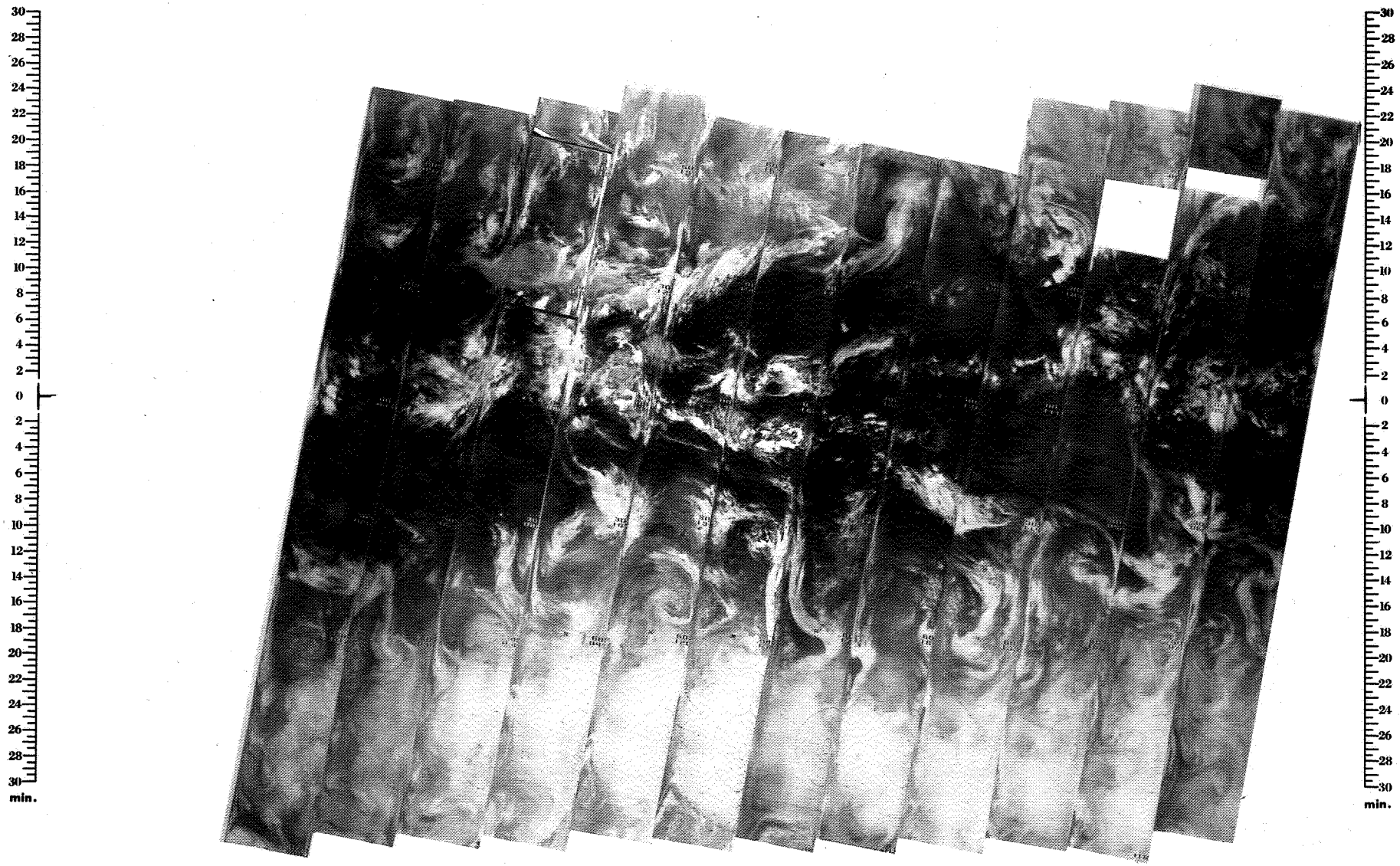
2 JUNE 1973

11.5 μm



2 JUNE 1973

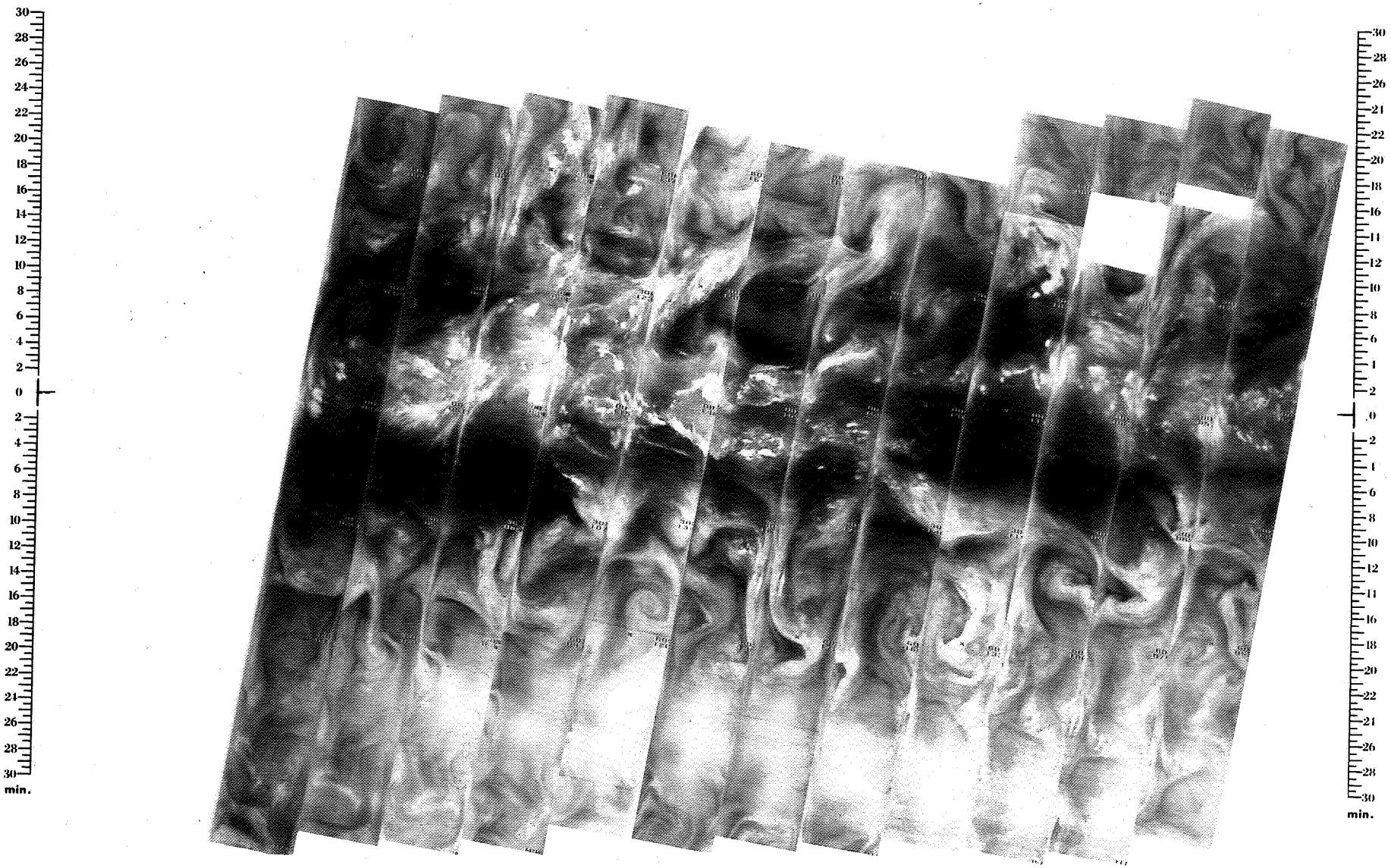
6.7 μm

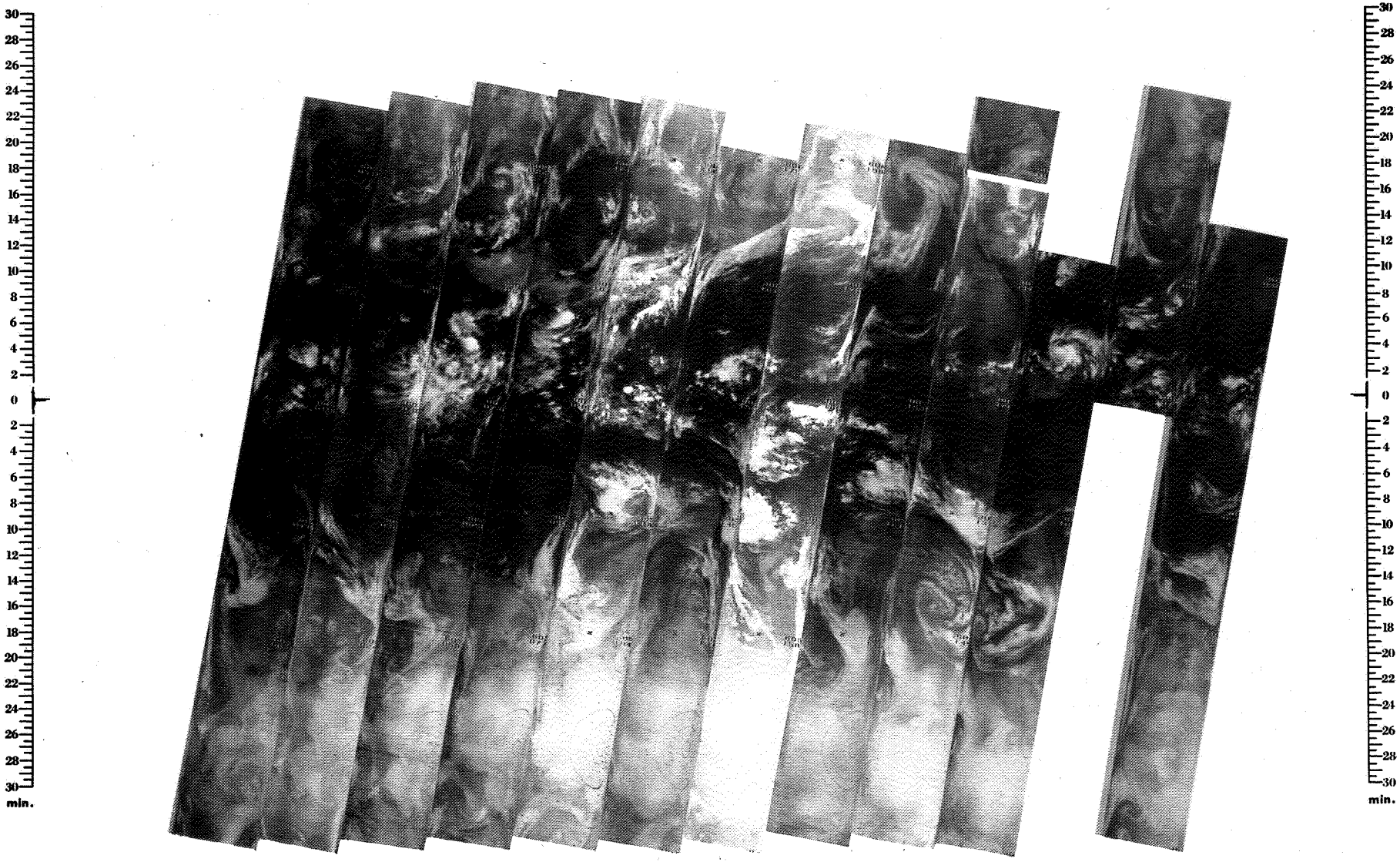


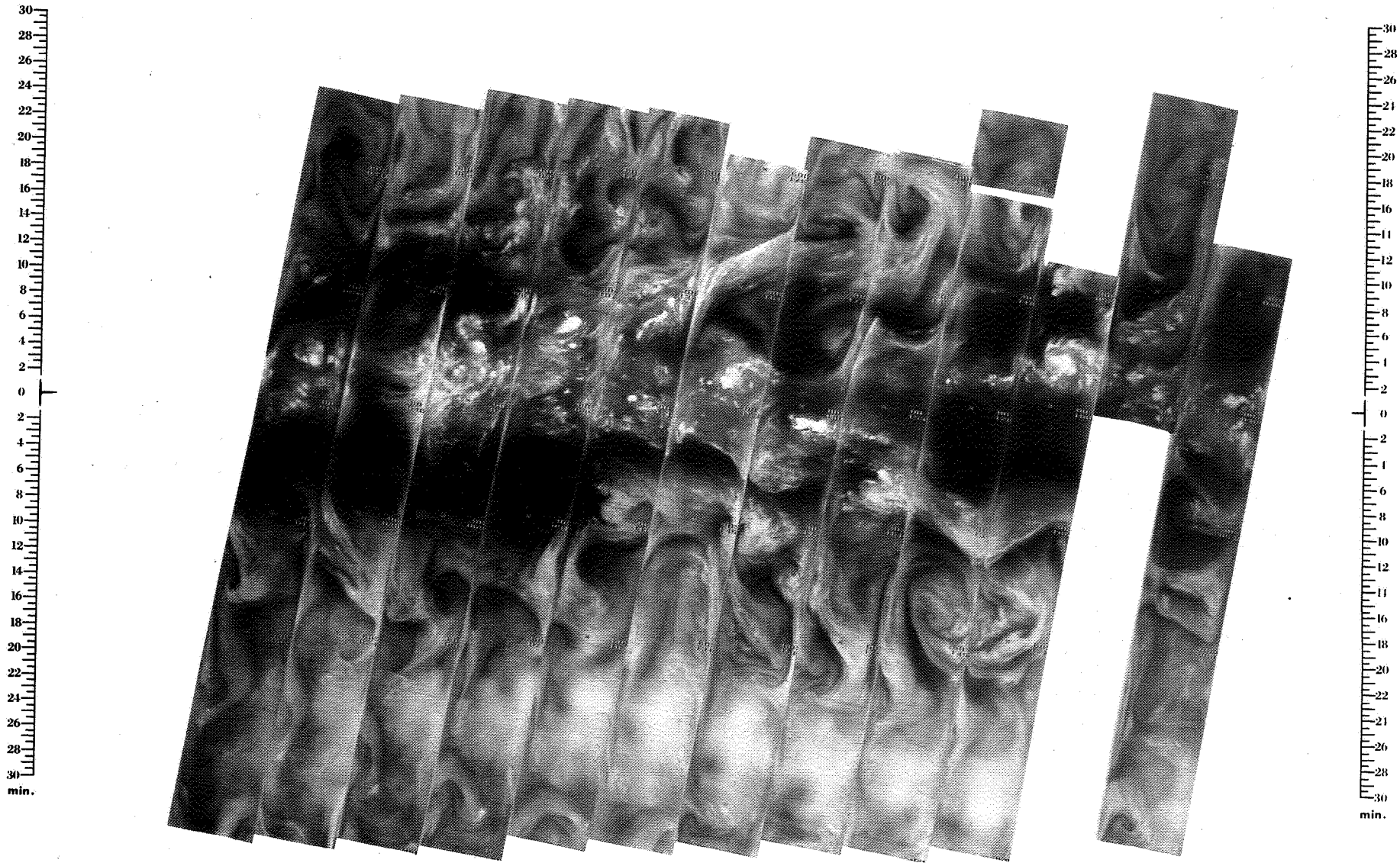
2345 2344 2343 2342 2341 2340 2339 2338 2337 2336 2335 2334 2333 2332

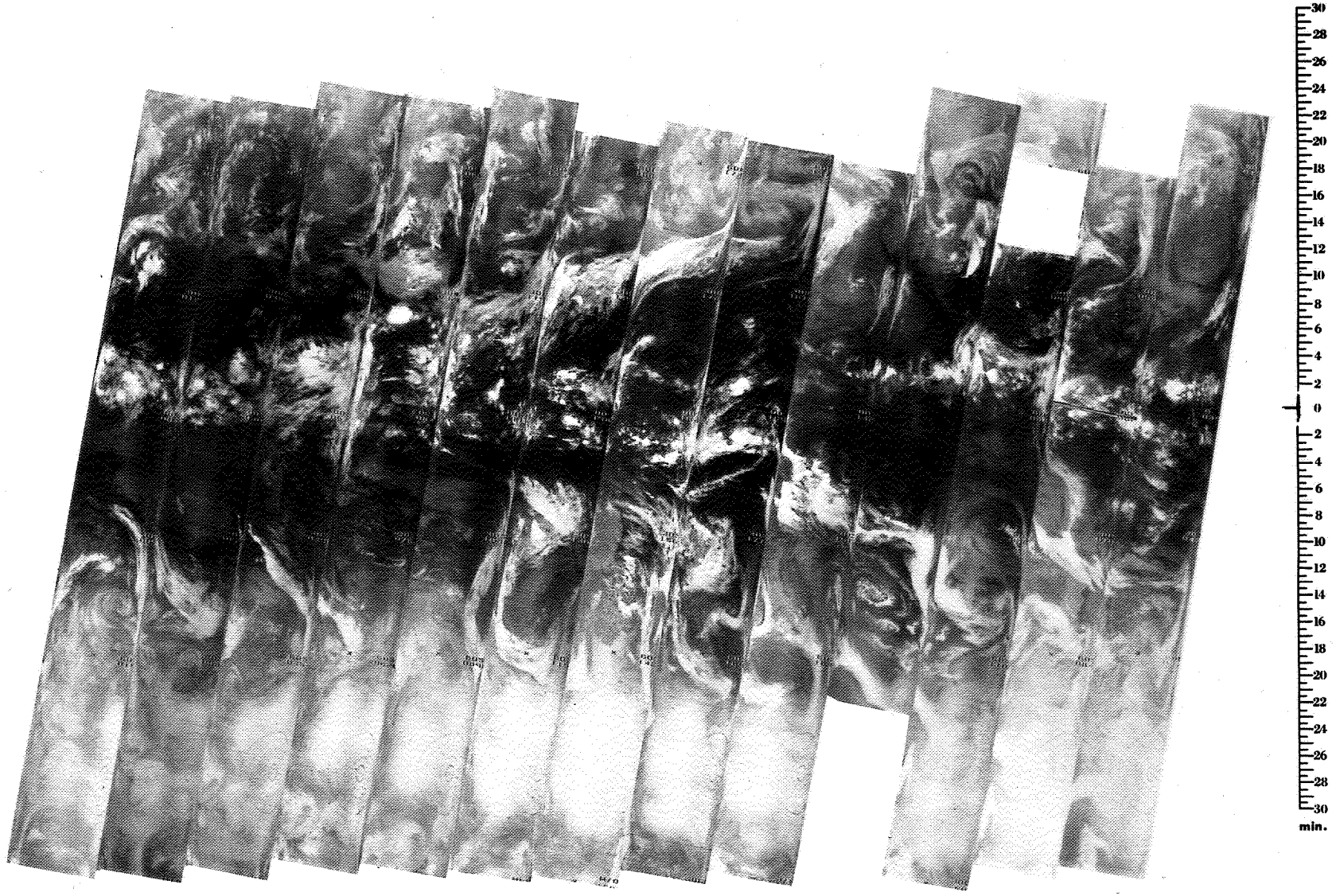
3 JUNE 1973

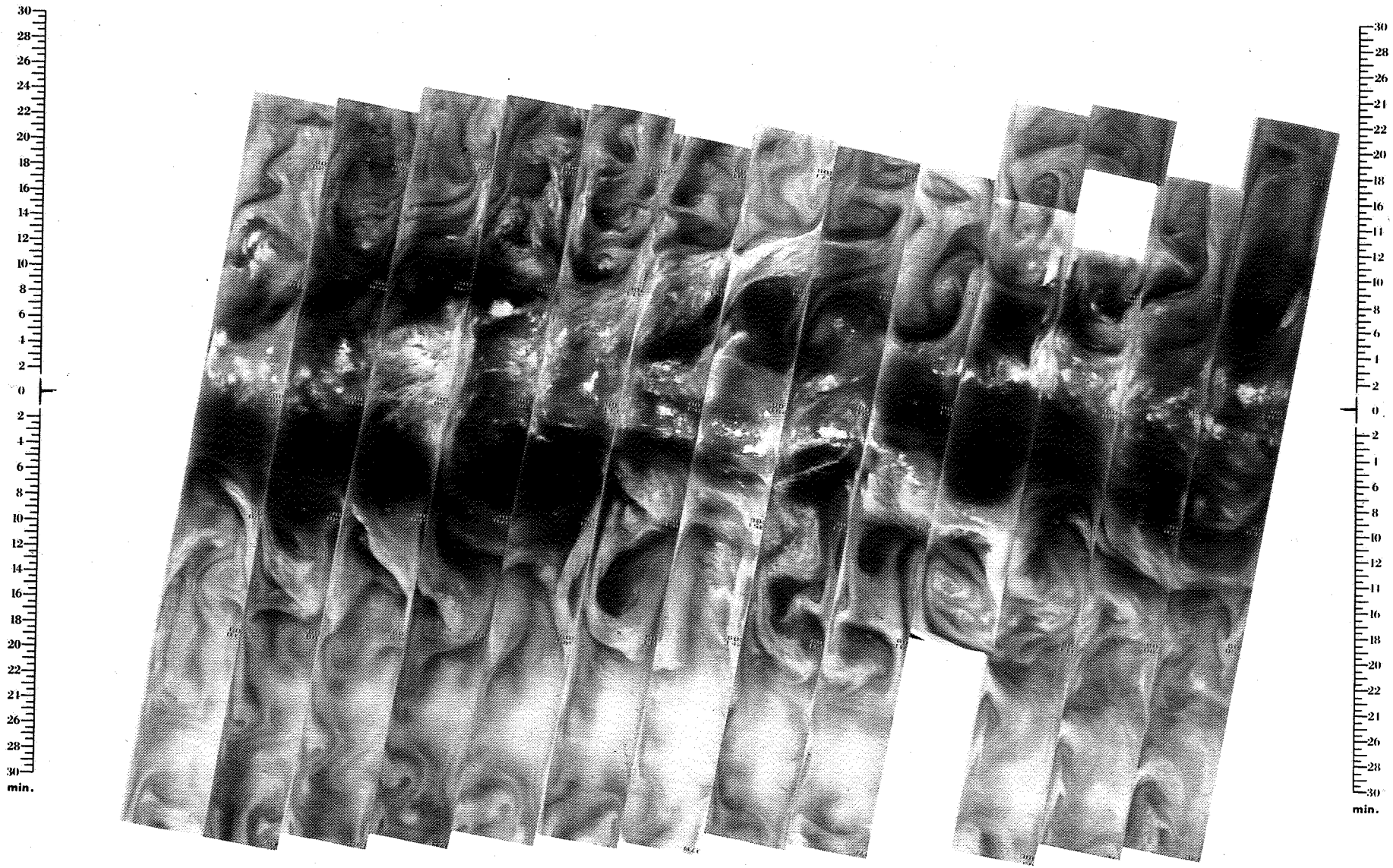
11.5 μm

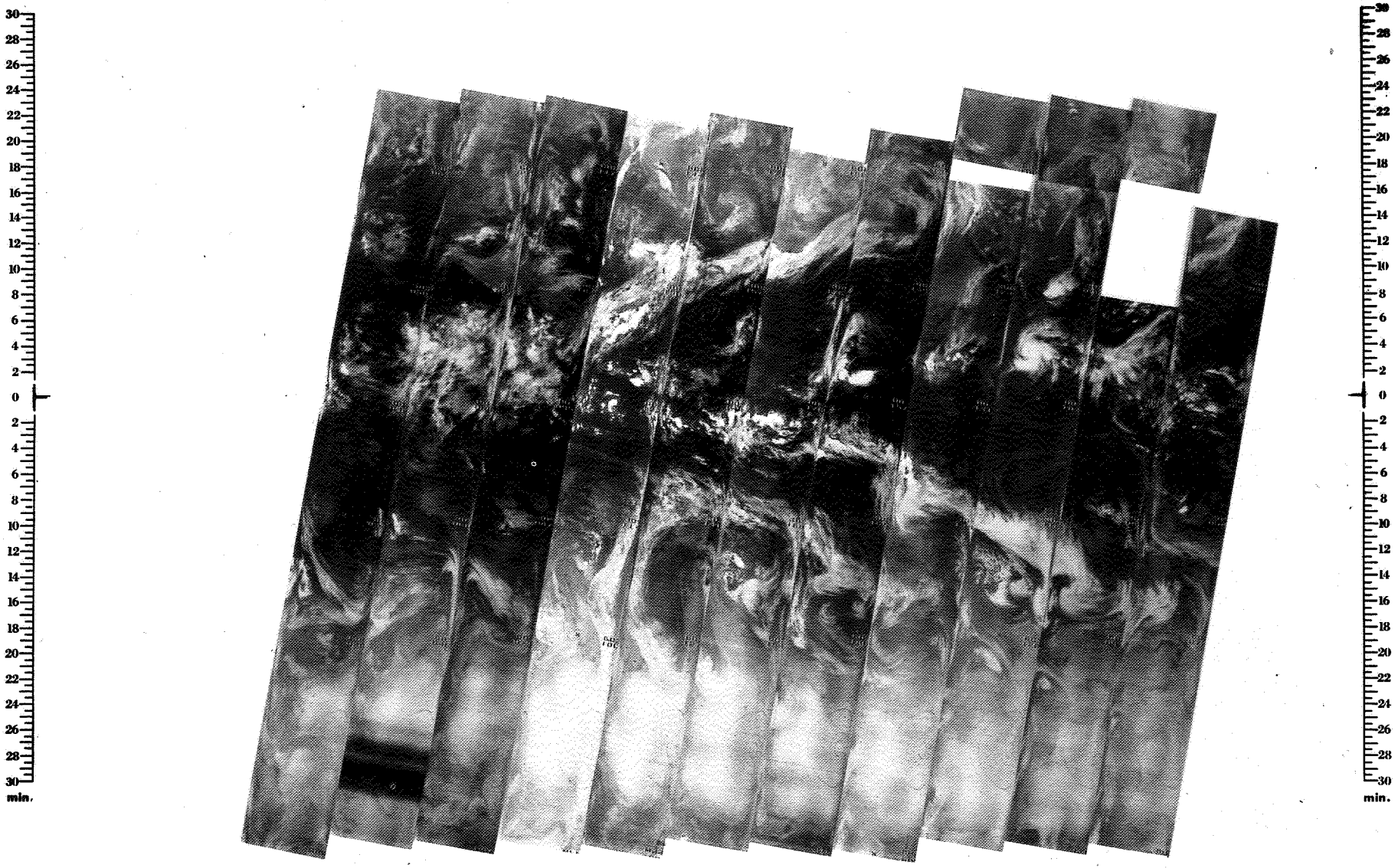

min.
min.
2345
2344
2343
2342
2341
2340
2339
2338
2337
2336
2335
2334
2333
2332
3 JUNE 1973
6.7 μm

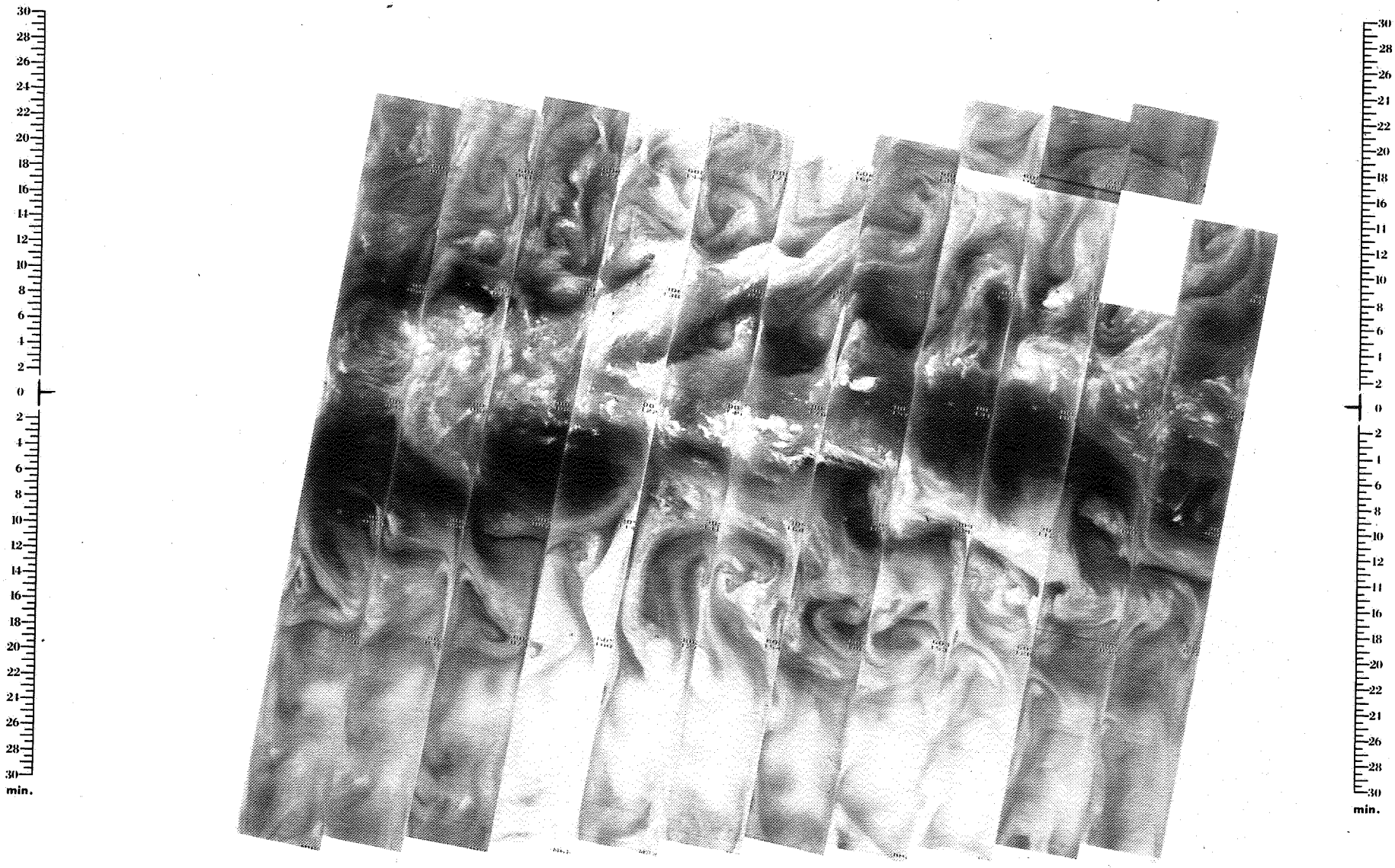

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2358 2357 2356 2355 2354 2353 2352 2351 2350 2349 2348 2347 2346
4 JUNE 1973
11.5 μm

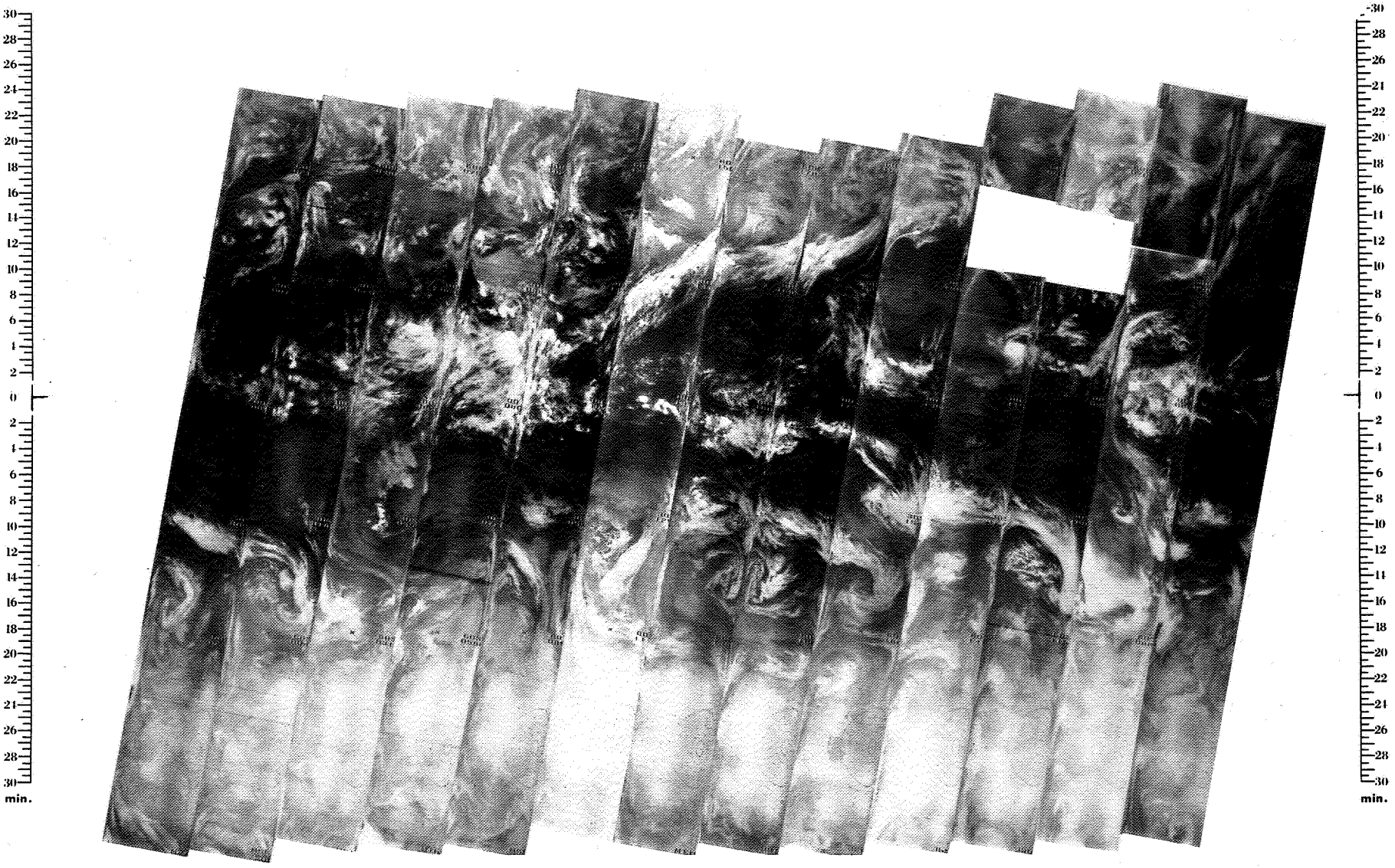

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2358 2357 2356 2355 2354 2353 2352 2351 2350 2349 2348 2347 2346
4 JUNE 1973
6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2371 2370 2369 2368 2367 2366 2365 2364 2363 2362 2361 2360 2359
5 JUNE 1973
11.5 μm


min.
min.
2371
2370
2369
2368
2367
2366
2365
2364
2363
2362
2361
2360
2359
5 JUNE 1973
6.7 μm

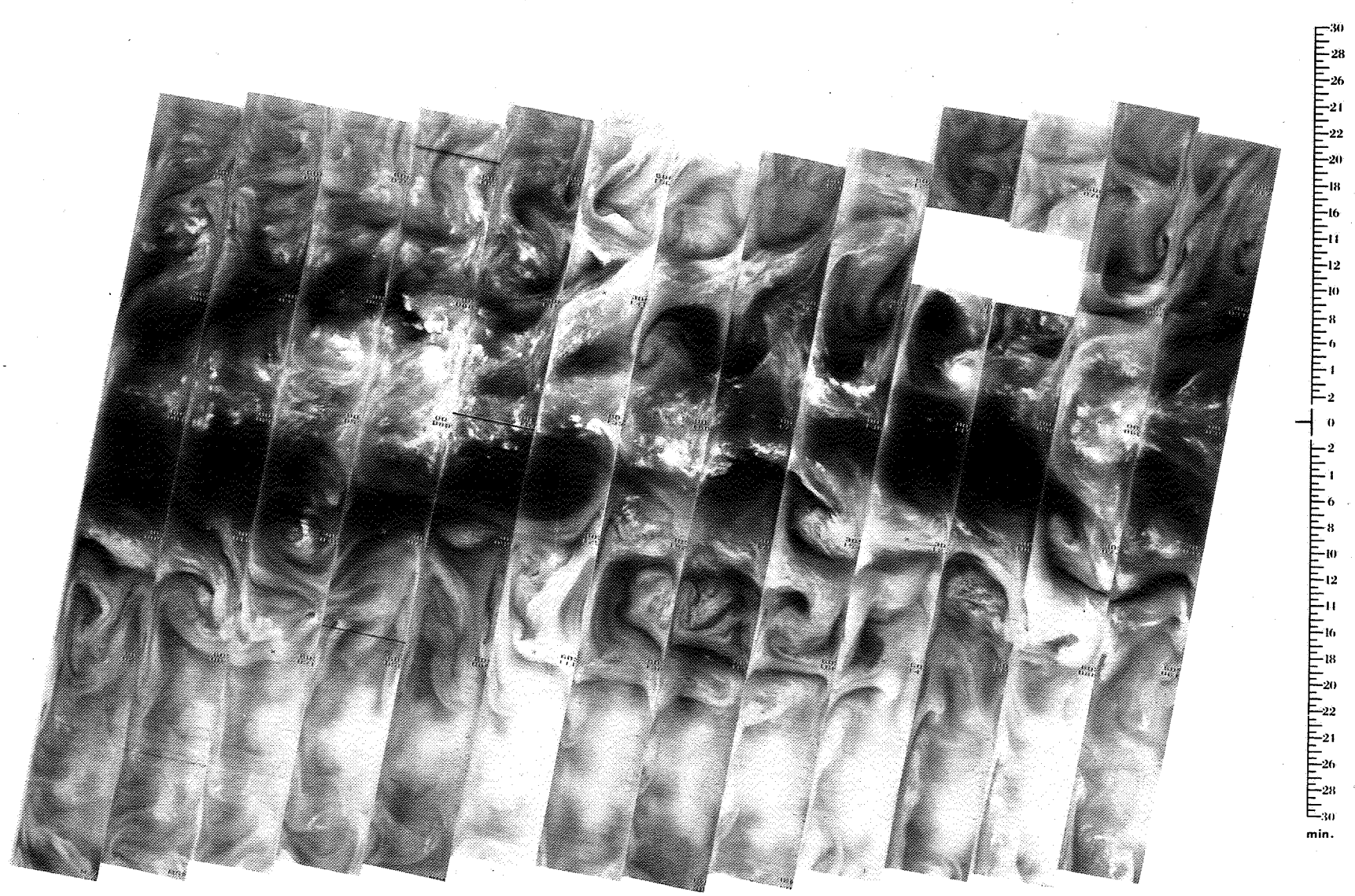

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2385 2384 2383 2382 2381 2380 2379 2378 2377 2376 2375 2374 2373 2372
6 JUNE 1973
11.5 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2385 2384 2383 2382 2381 2380 2379 2378 2377 2376 2375 2374 2373 2372
6 JUNE 1973
6.7 μm



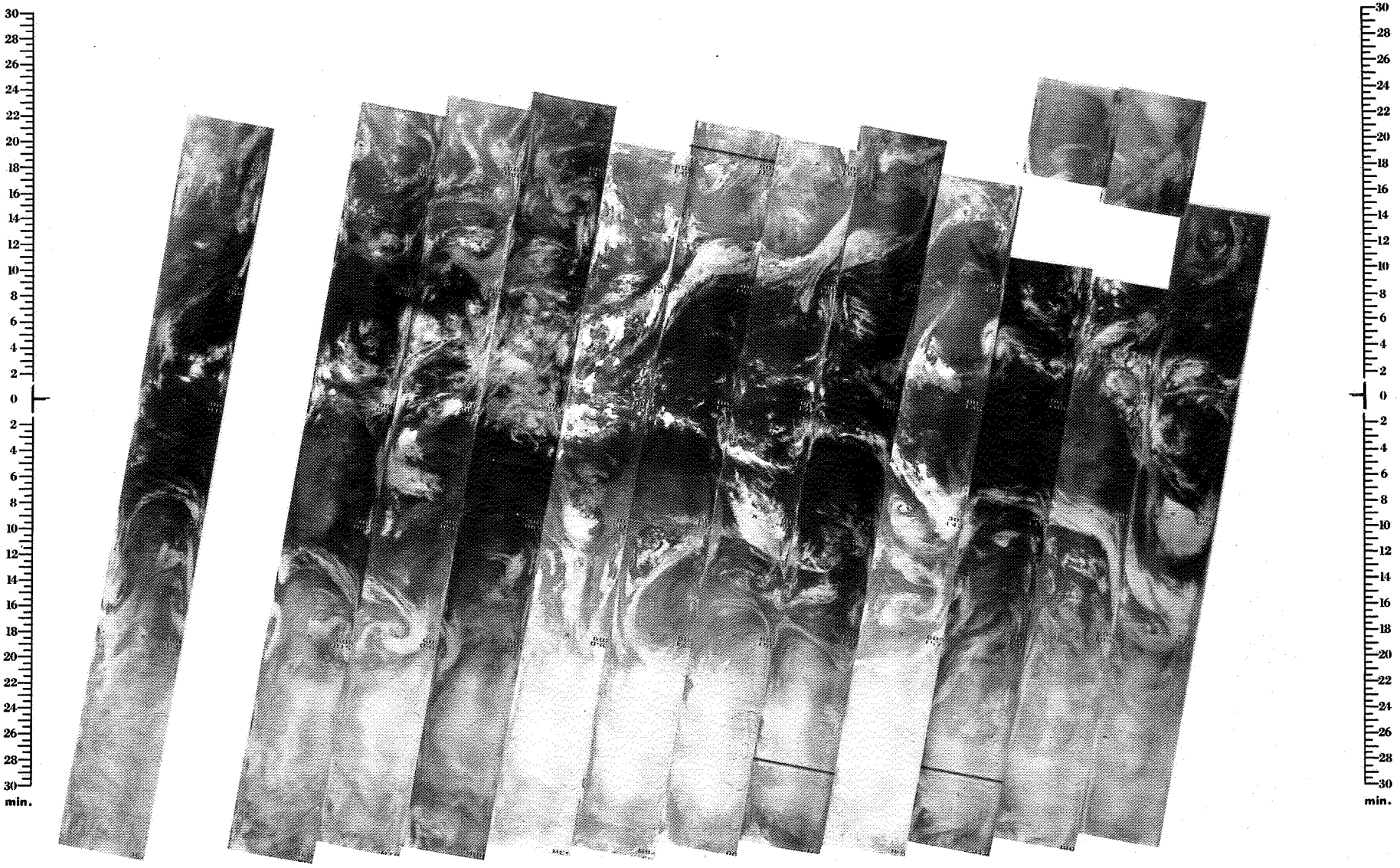
7 JUNE 1973

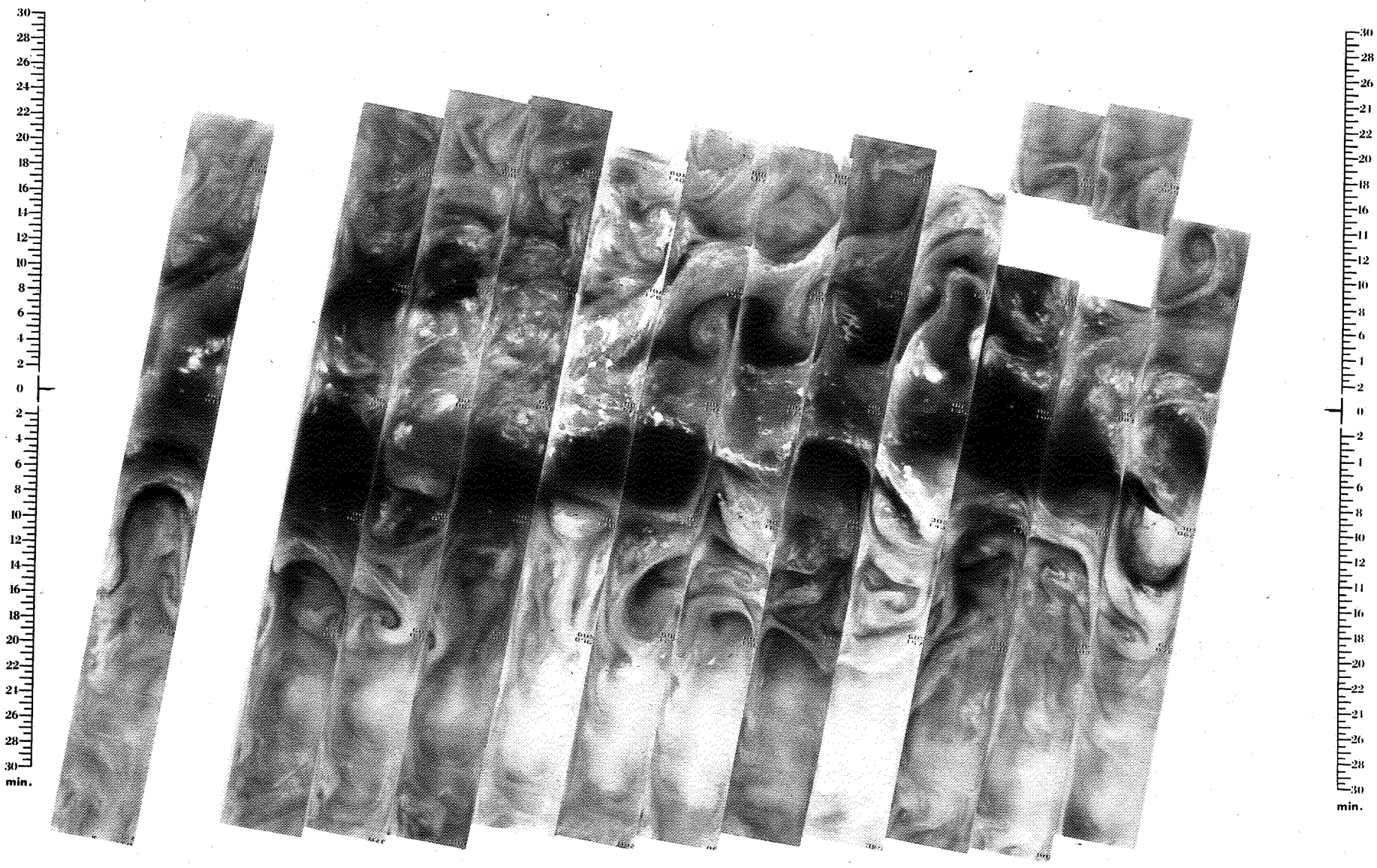
11.5 μm

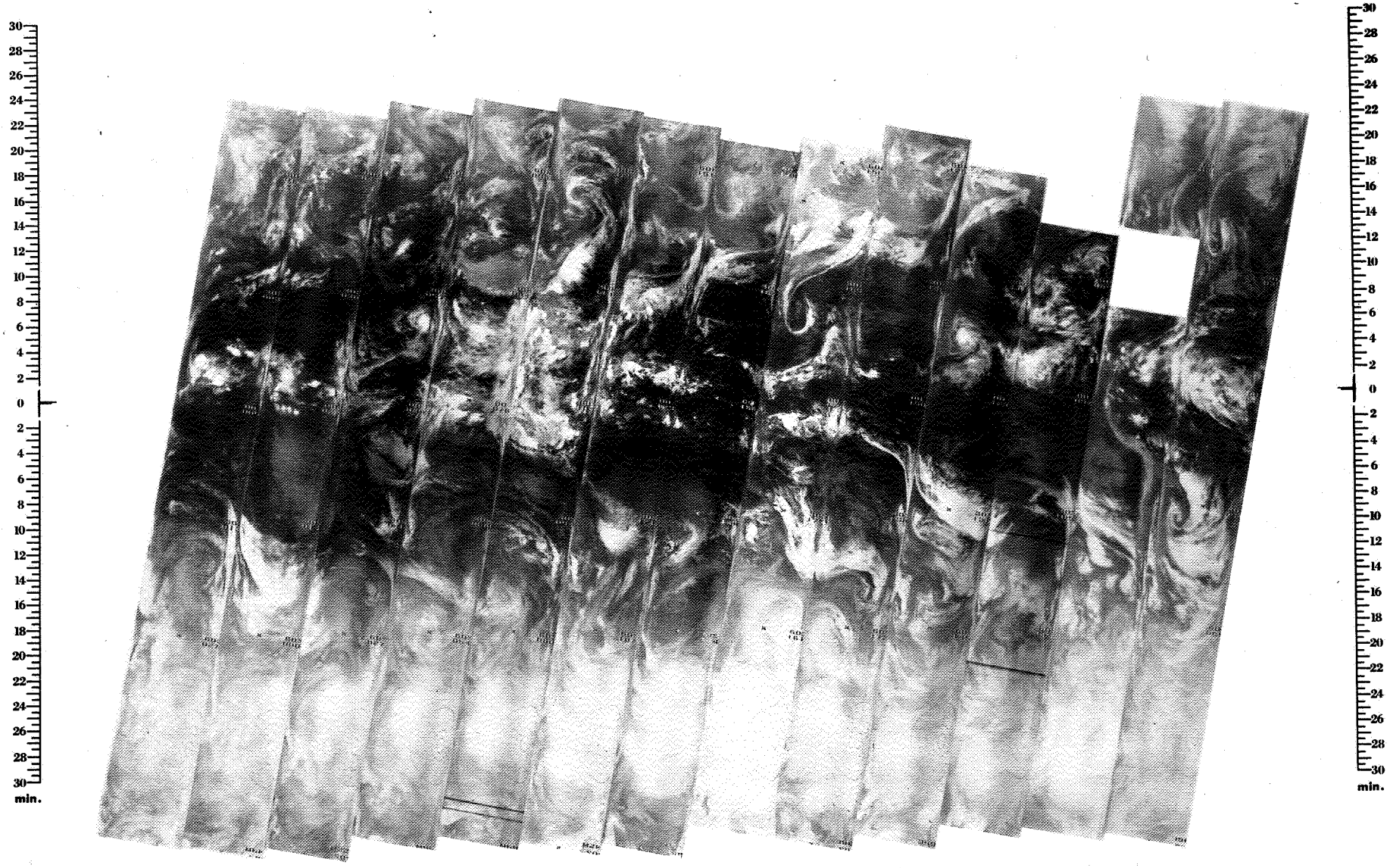


7 JUNE 1973

6.7 μm

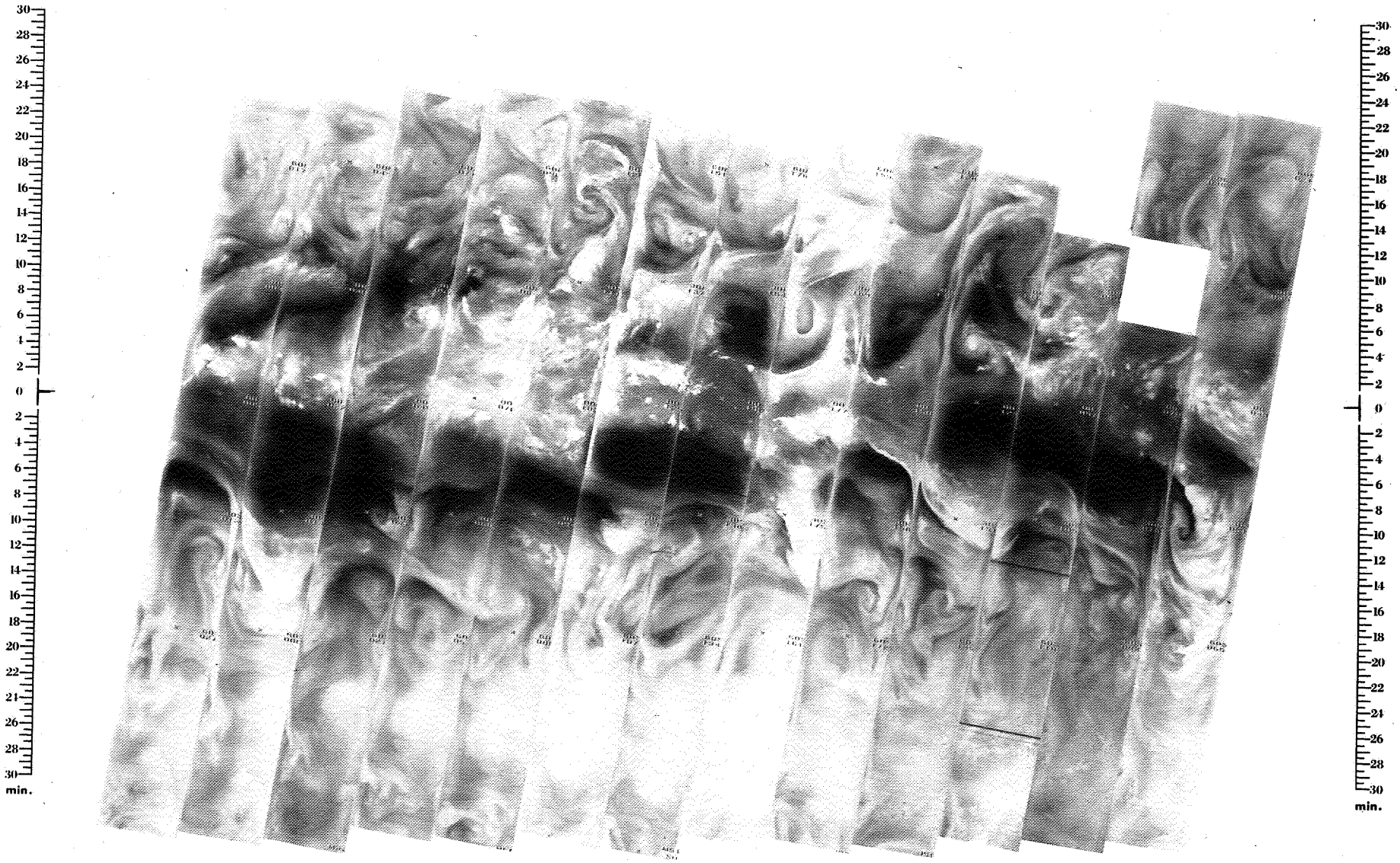

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2412 2411 2410 2409 2408 2407 2406 2405 2404 2403 2402 2401 2400 2399
8 JUNE 1973
11.5 μm

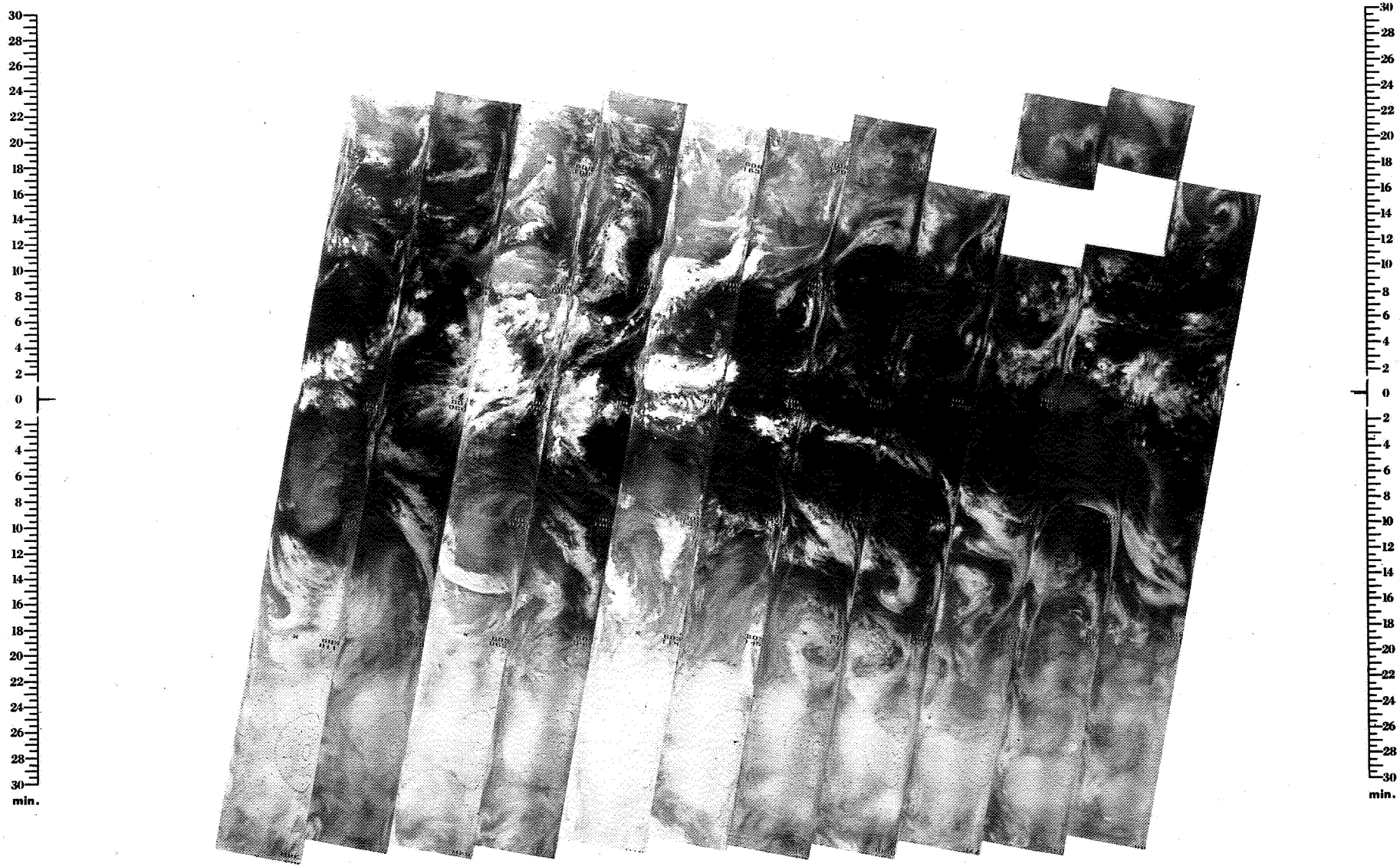

min.
min.
2412
2411
2410
2409
2408
2407
2406
2405
2404
2403
2402
2401
2400
2399
8 JUNE 1973
6.7 μm

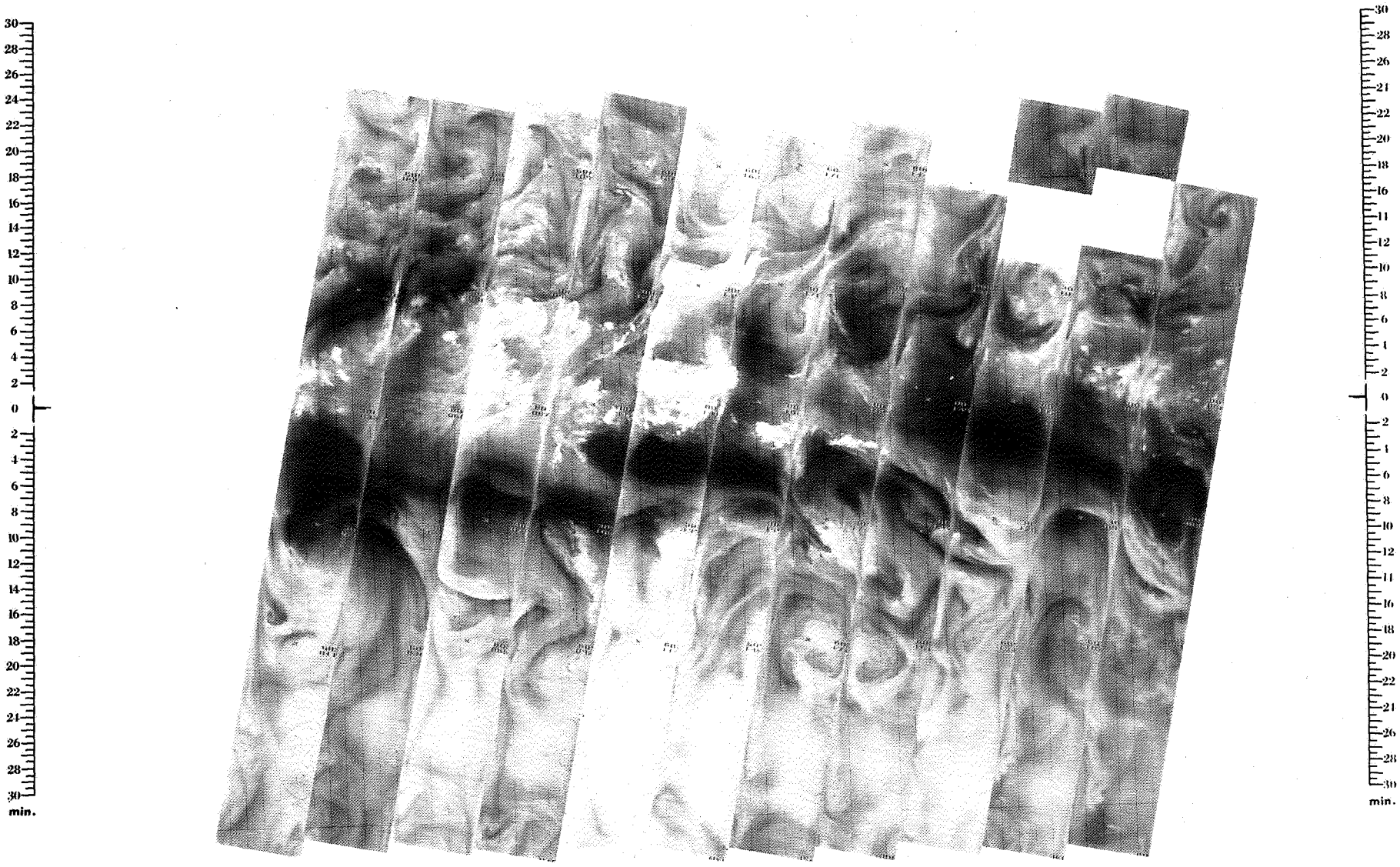


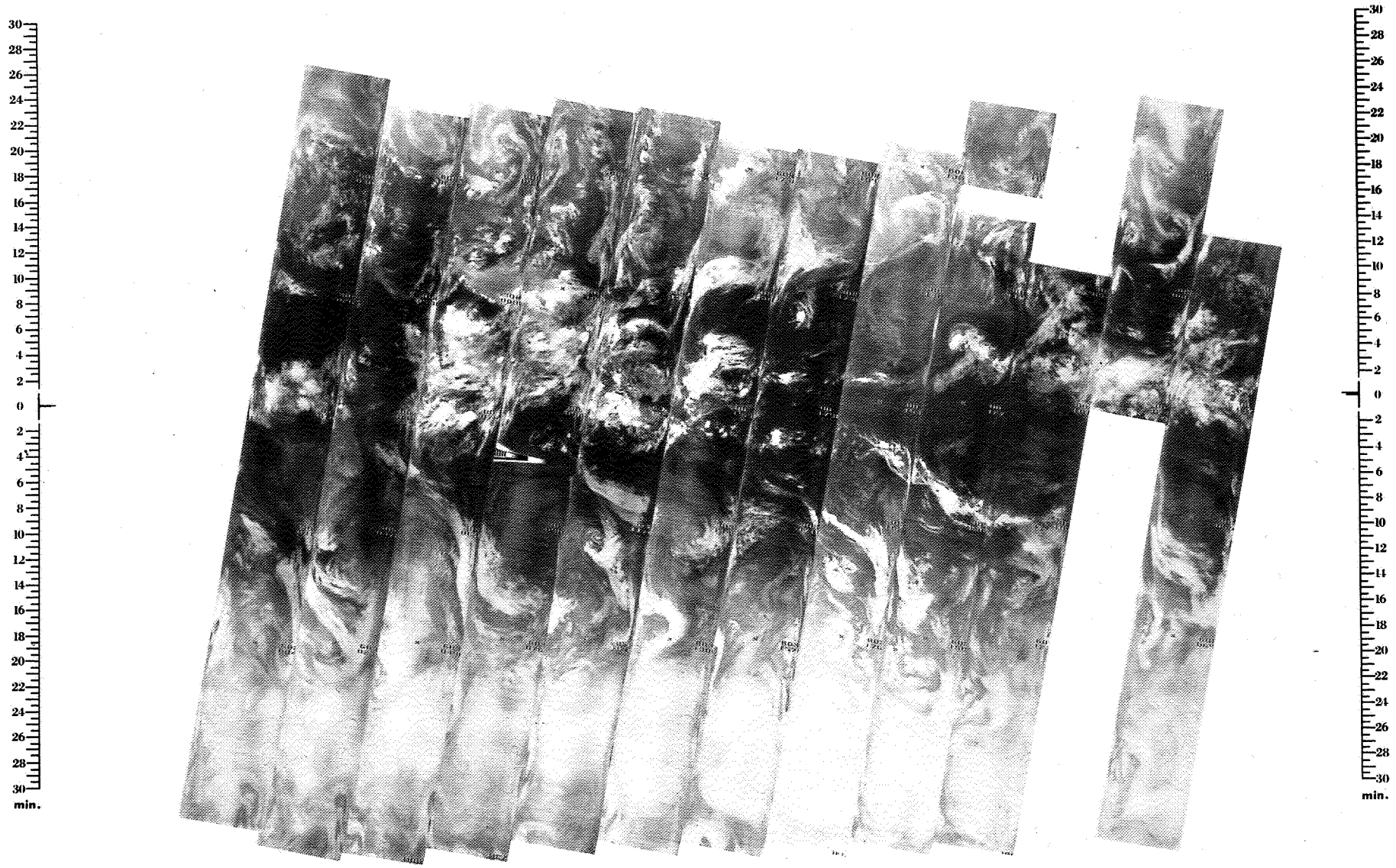
9 JUNE 1973

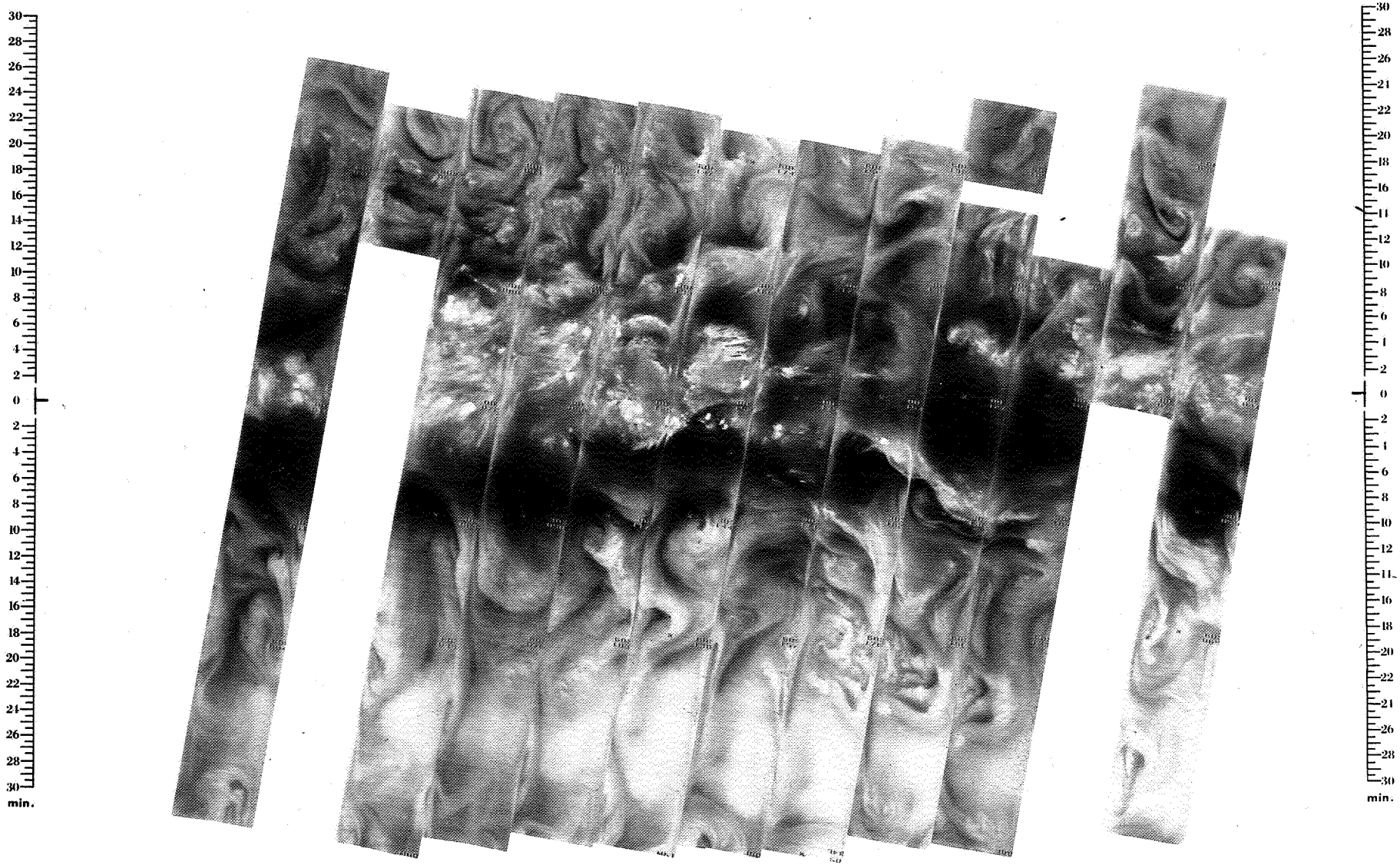
11.5 μm


min.
min.
2425 2424 2423 2422 2421 2420 2419 2418 2417 2416 2415 2414 2413
9 JUNE 1973
6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2439 2438 2437 2436 2435 2434 2433 2432 2431 2430 2429 2428 2427 2426
10 JUNE 1973
11.5 μm

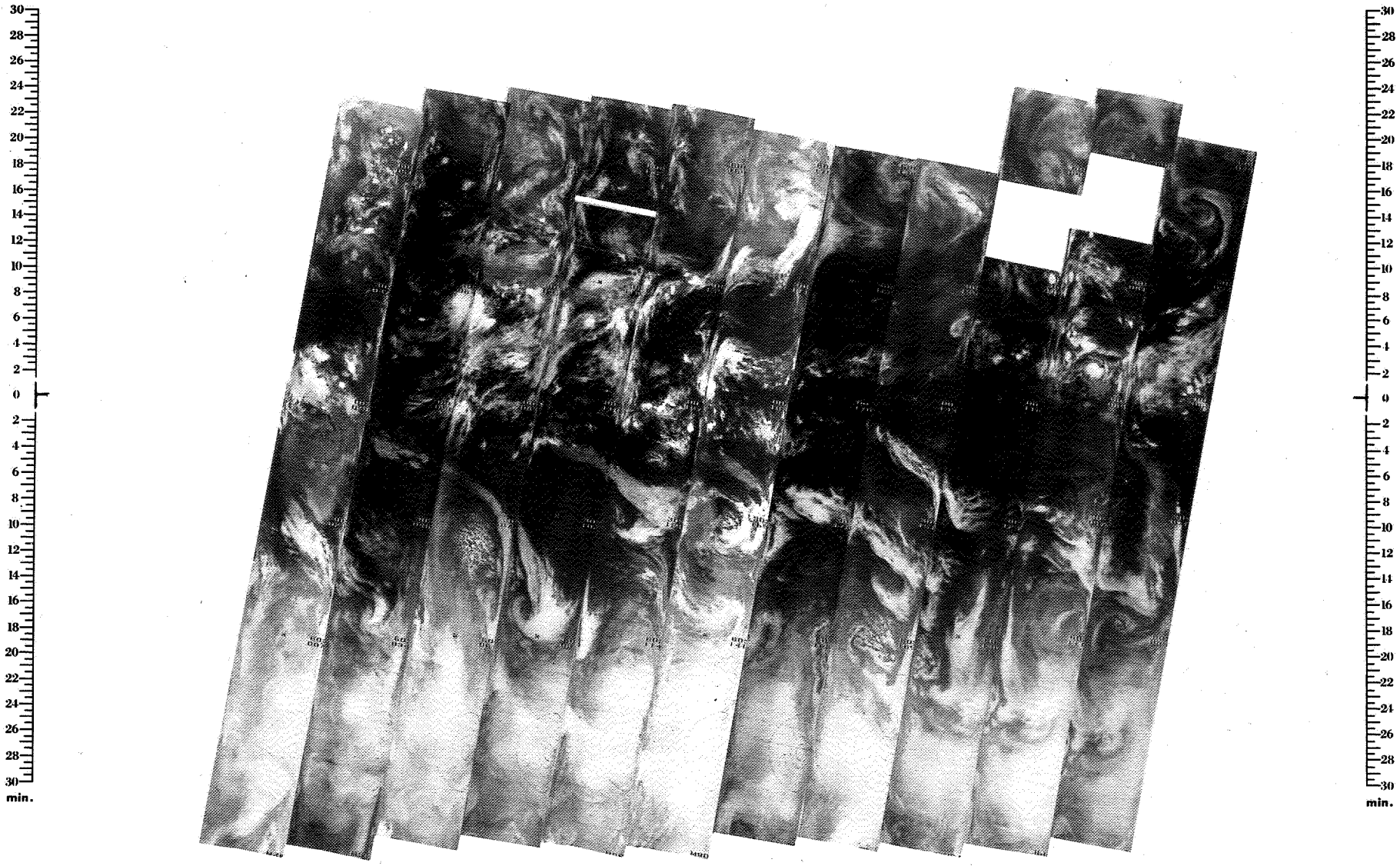

min.
2439
2438
2437
2436
2435
2434
2433
2432
2431
2430
2429
2428
2427
2426
10 JUNE 1973
6.7 μm


min.
min.
2452
2451
2450
2449
2448
2447
2446
2445
2444
2443
2442
2441
2440
11 JUNE 1973
11.5 μm



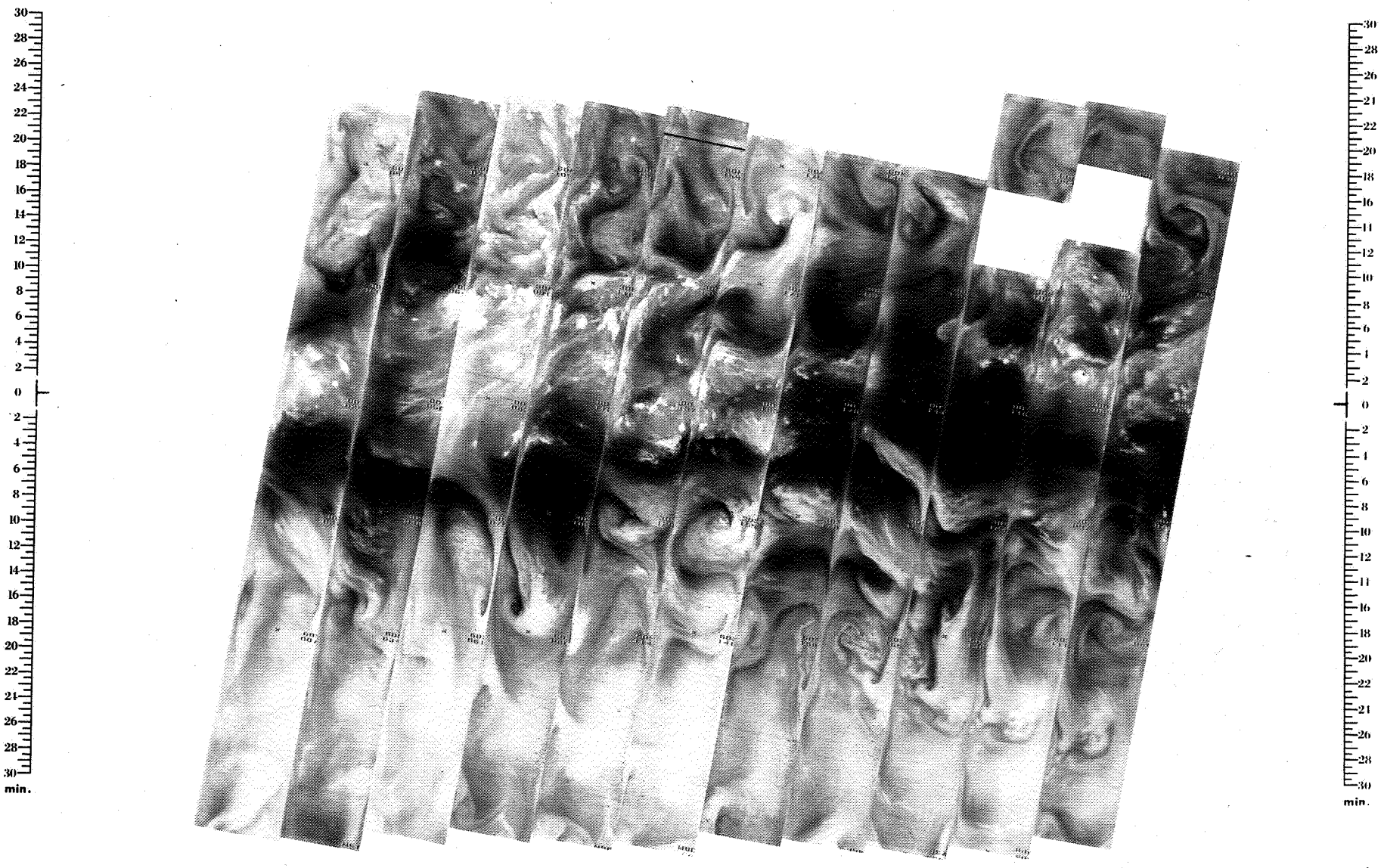
11 JUNE 1973

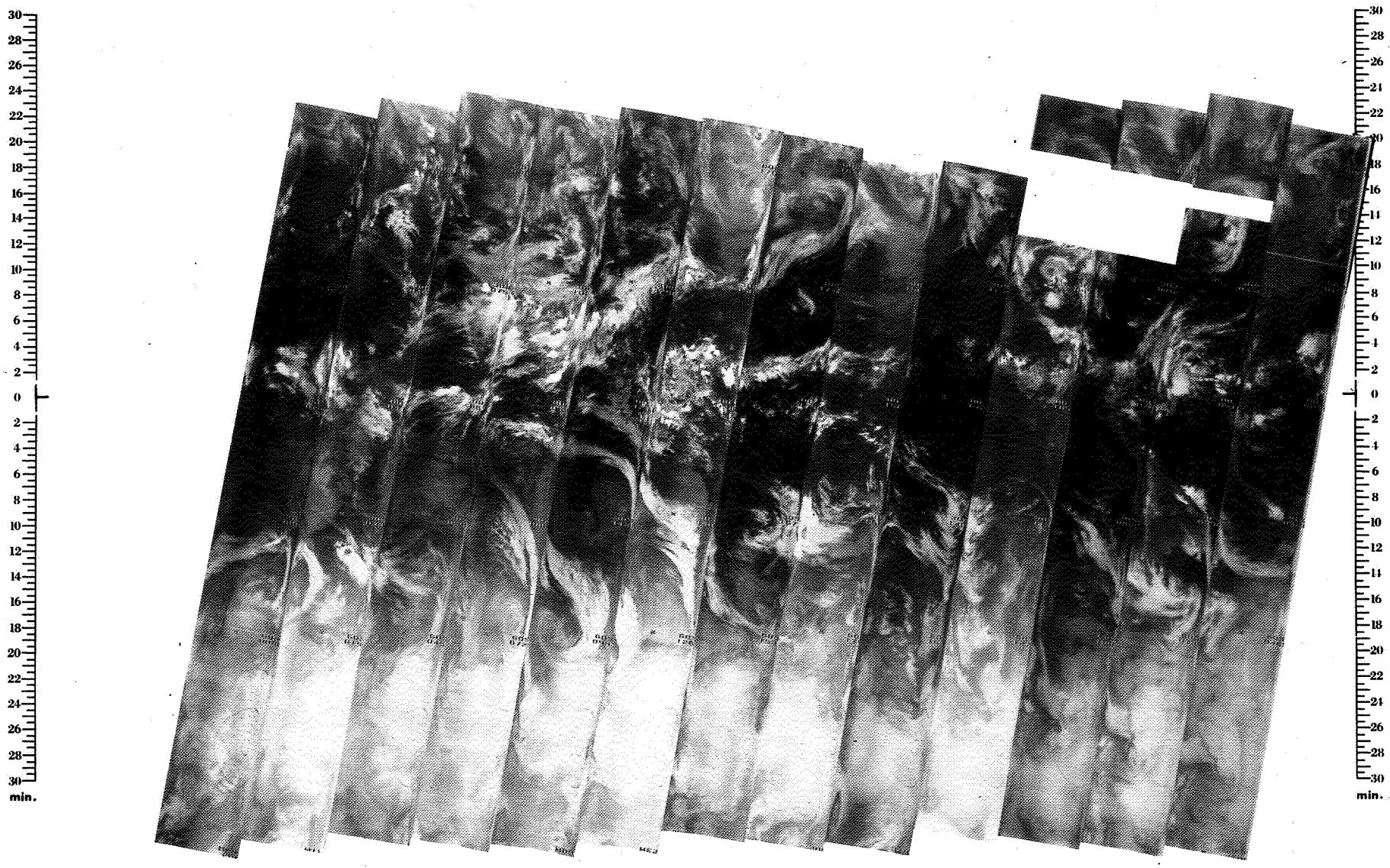
6.7 μm



12 JUNE 1973

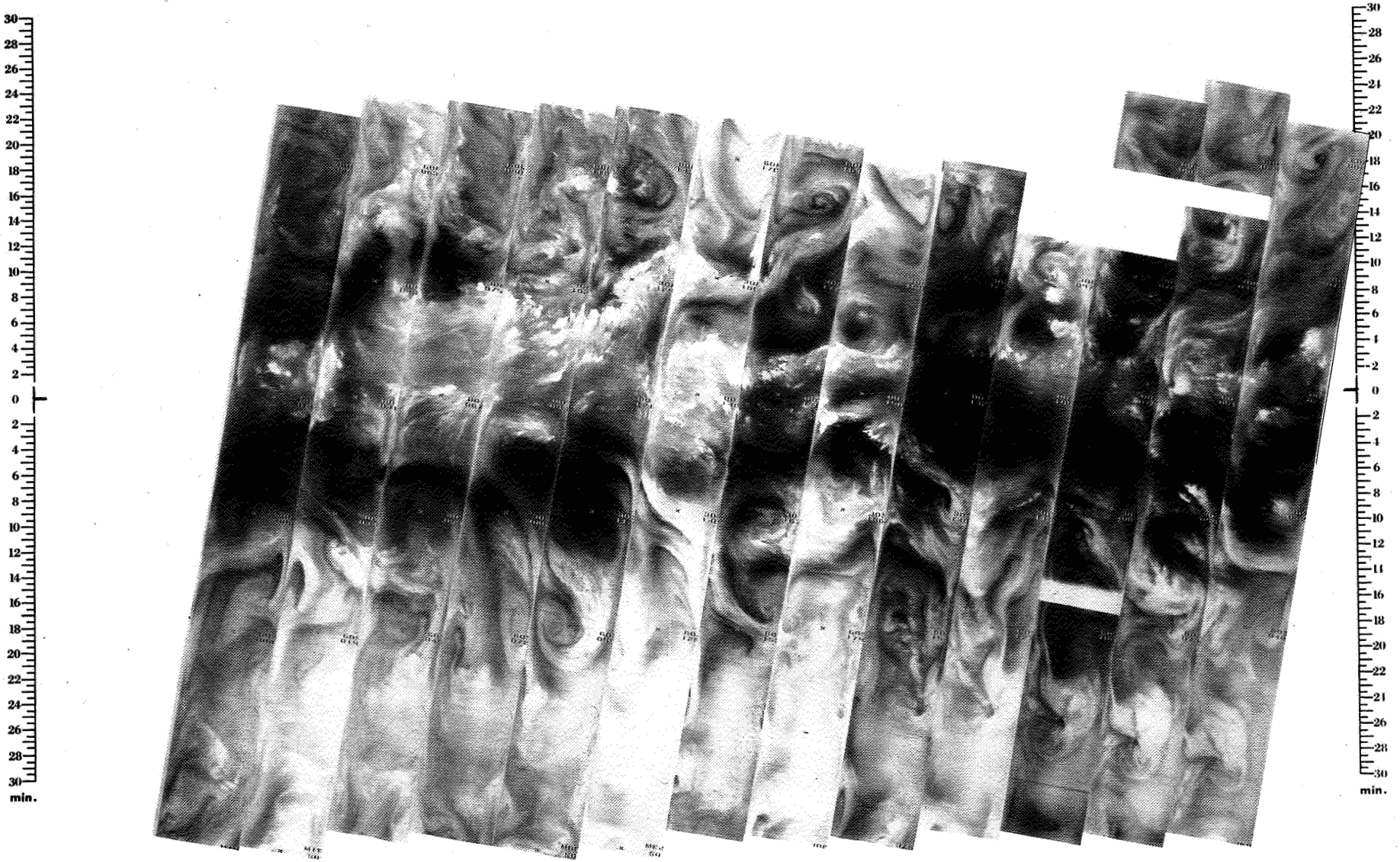
11.5 μm


min.
min.
2465 2464 2463 2462 2461 2460 2459 2458 2457 2456 2455 2454 2453
12 JUNE 1973
6.7 μm



13 JUNE 1973

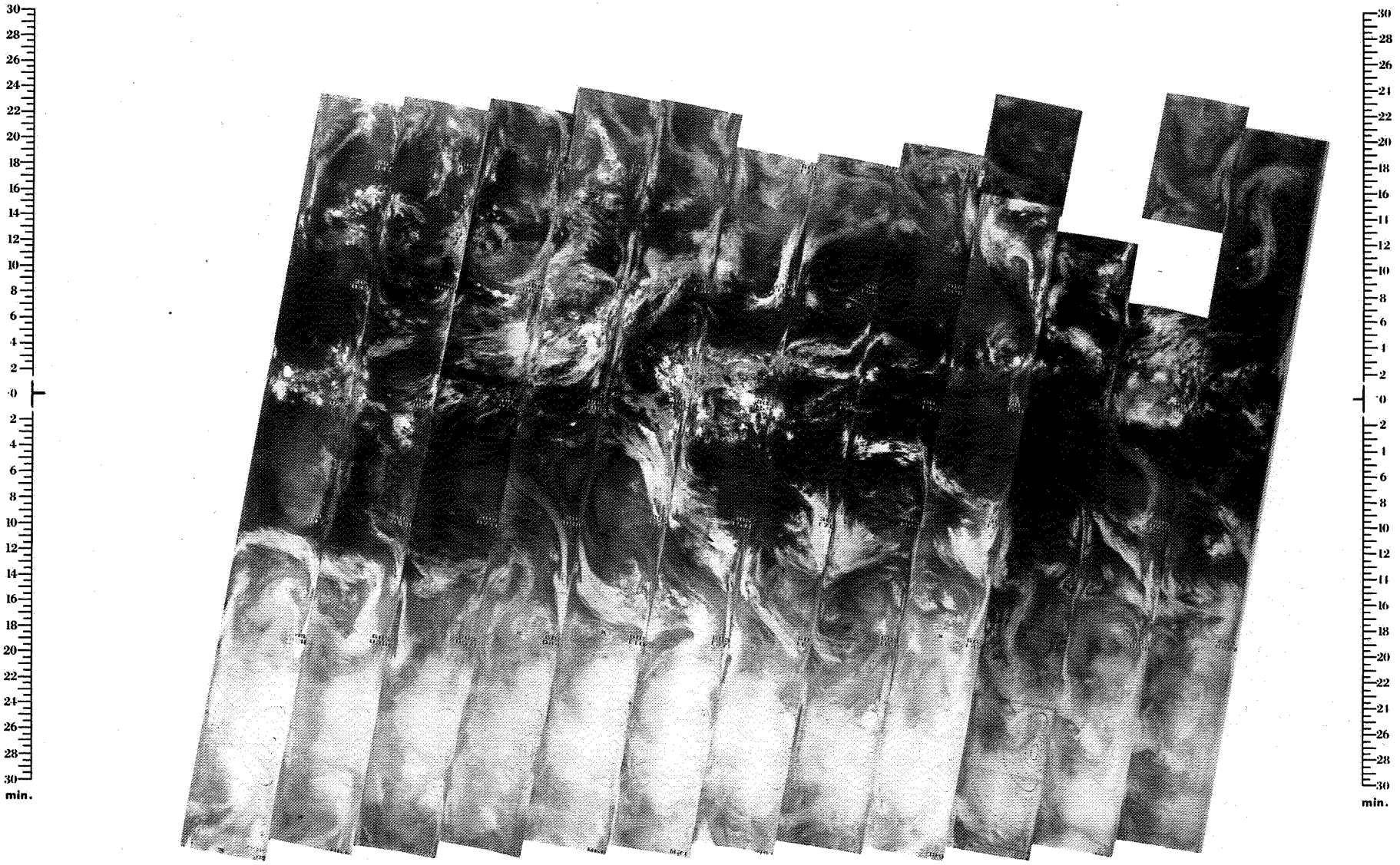
11.5 μm



2479 2478 2477 2476 2475 2474 2473 2472 2471 2470 2469 2468 2467 2466

13 JUNE 1973

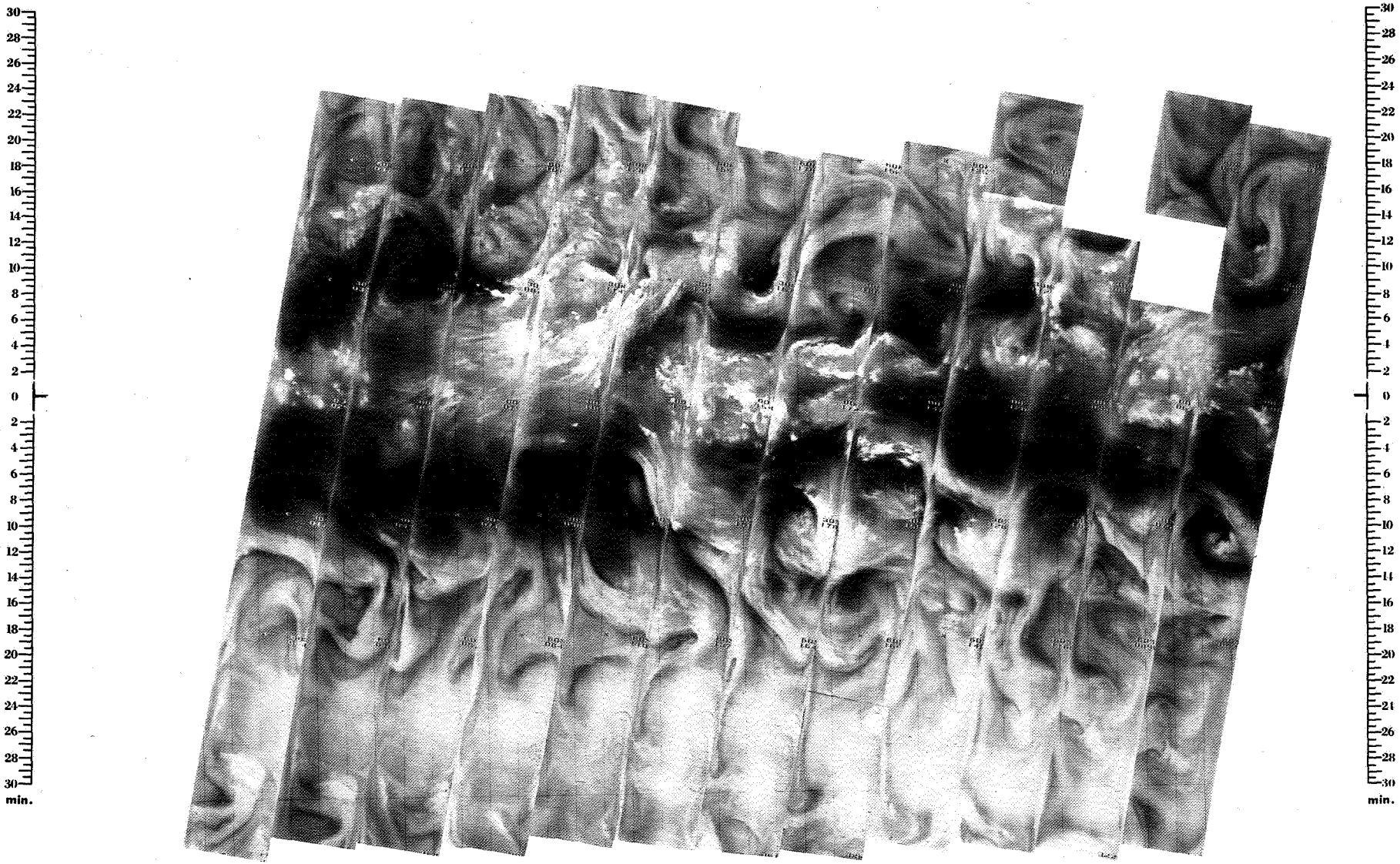
6.7 μm



2492 2491 2490 2489 2488 2487 2486 2485 2484 2483 2482 2481 2480

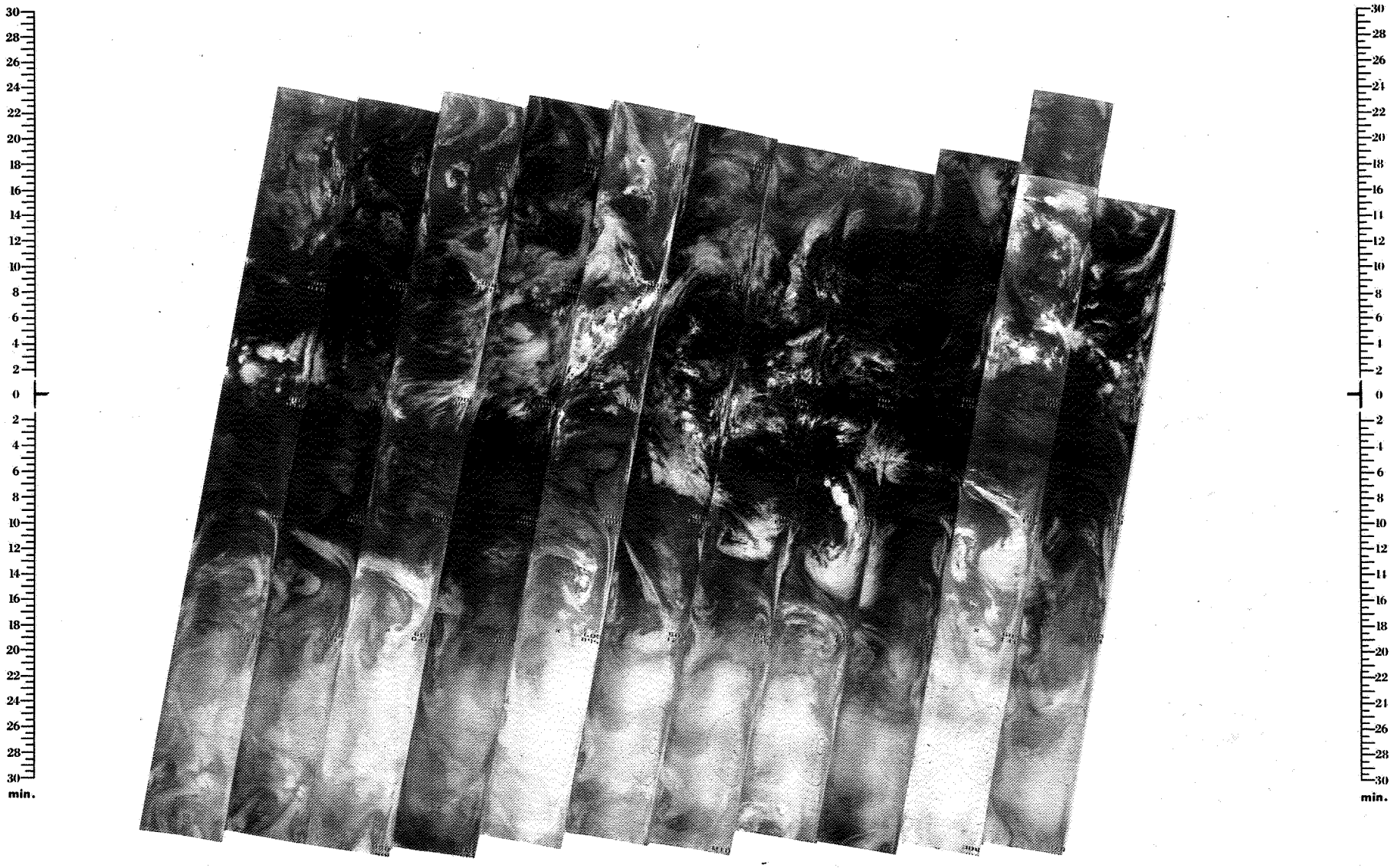
14 JUNE 1973

11.5 μm



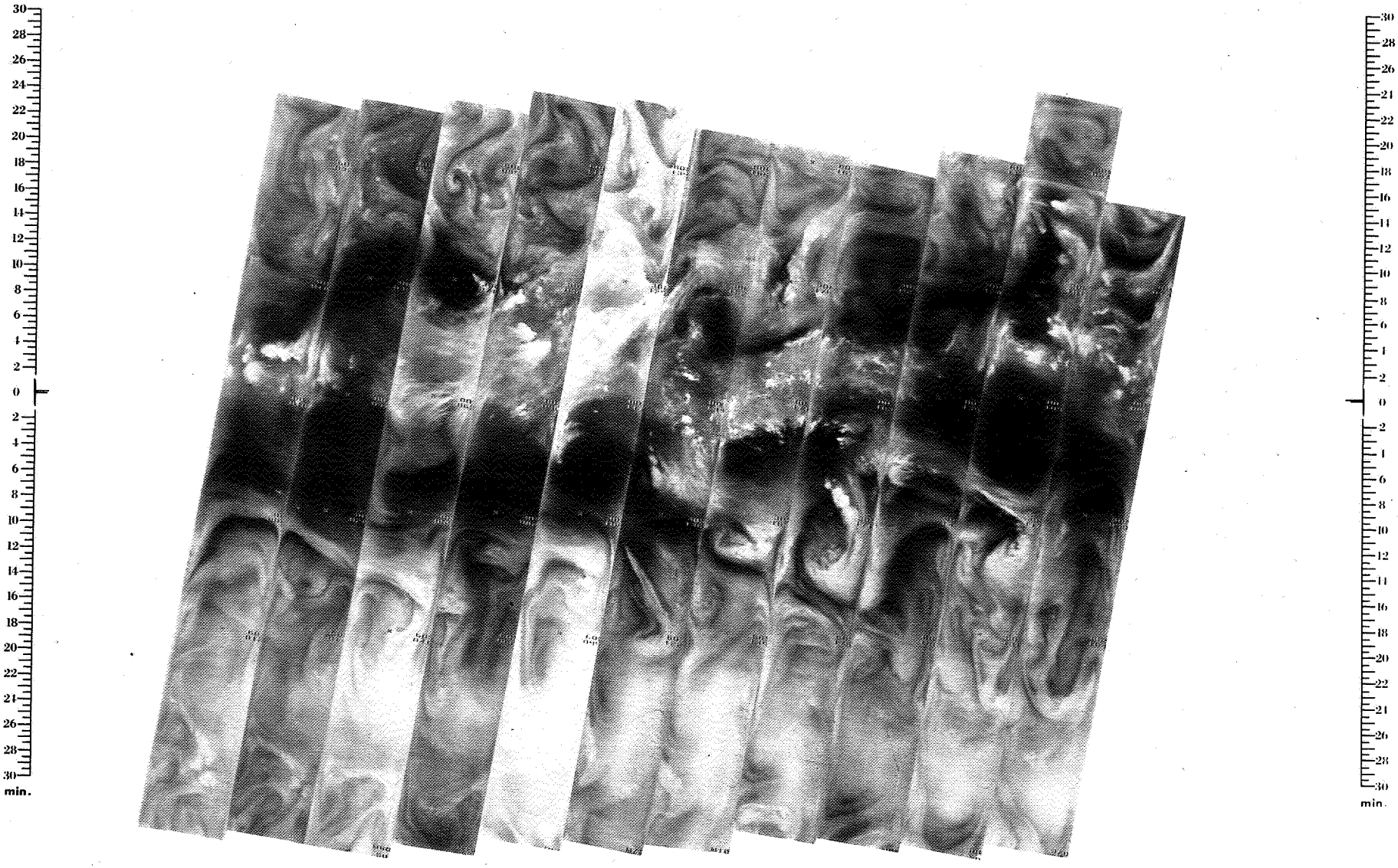
14 JUNE 1973

6.7 μm



15 JUNE 1973

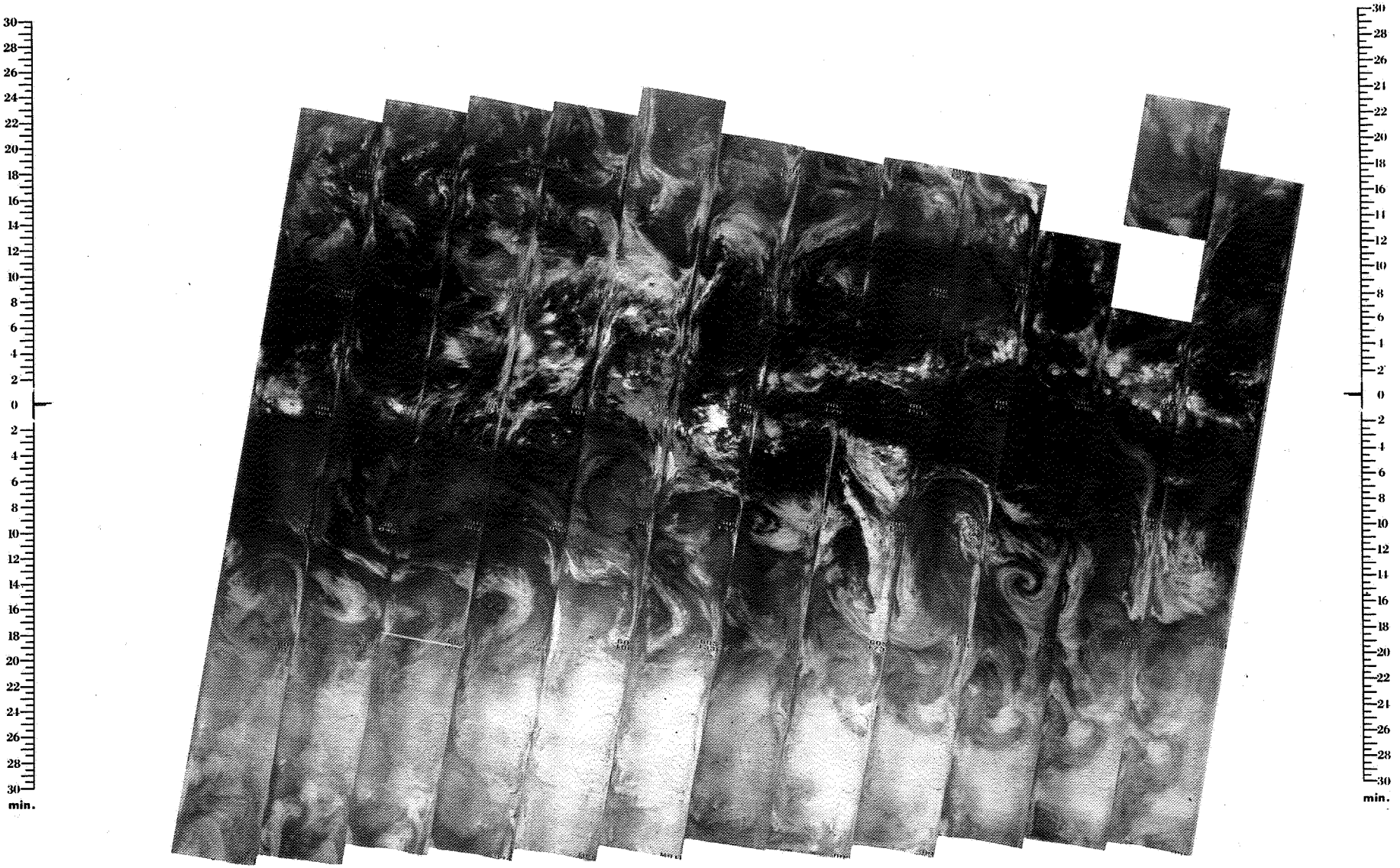
11.5 μm

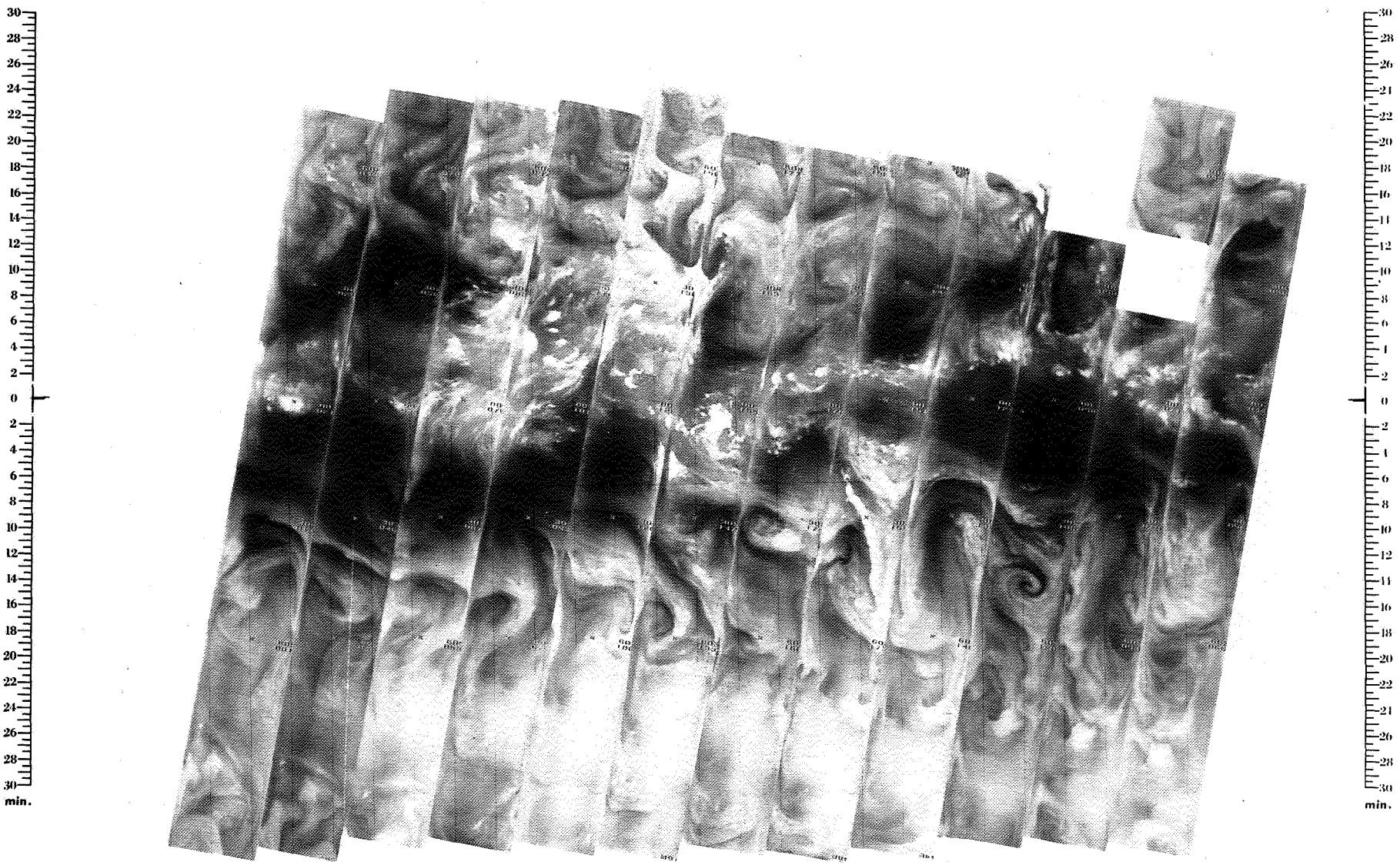


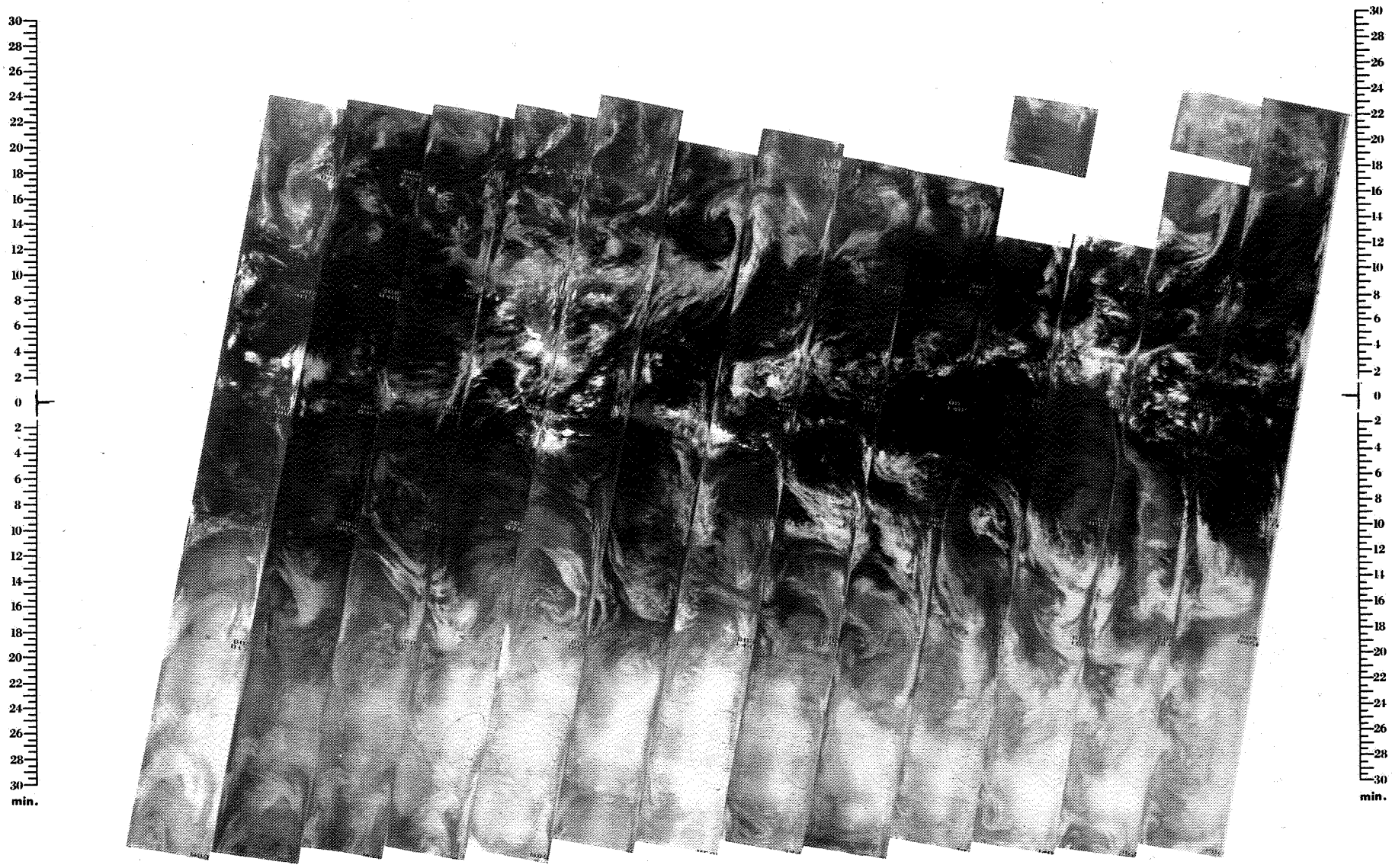
2506 2505 2504 2503 2502 2501 2500 2499 2498 2497 2496 2495 2494 2493

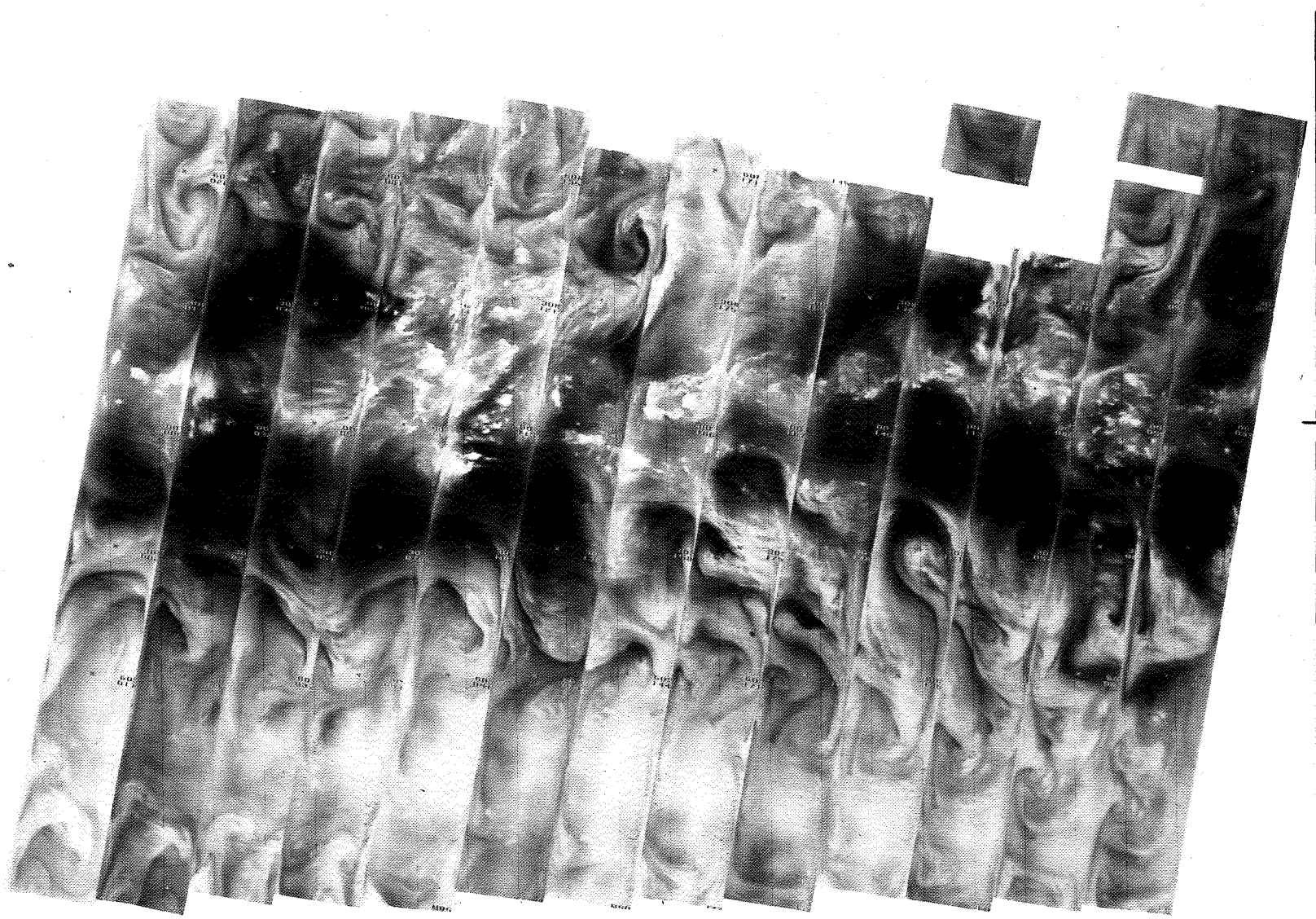
15 JUNE 1973

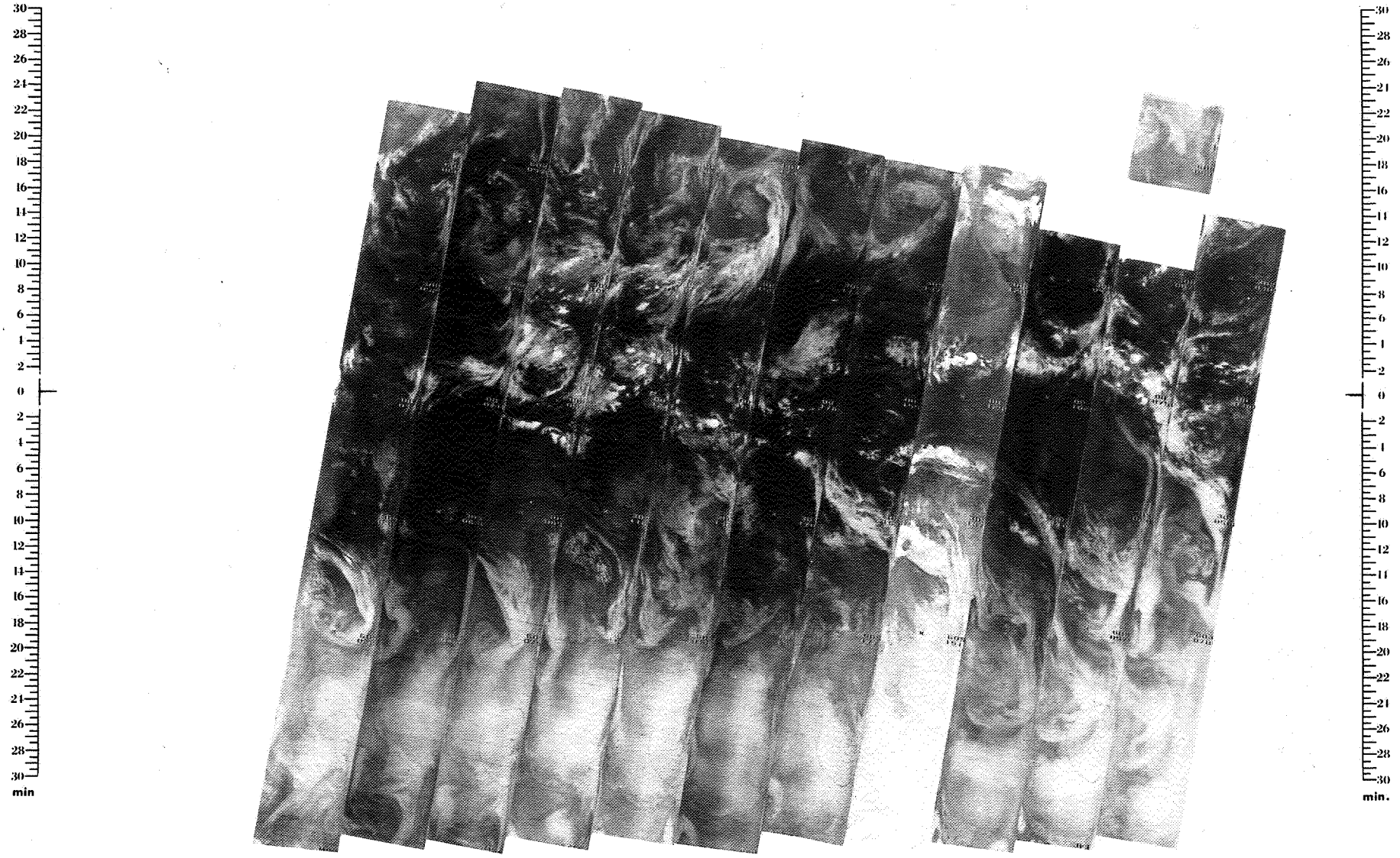
6.7 μm

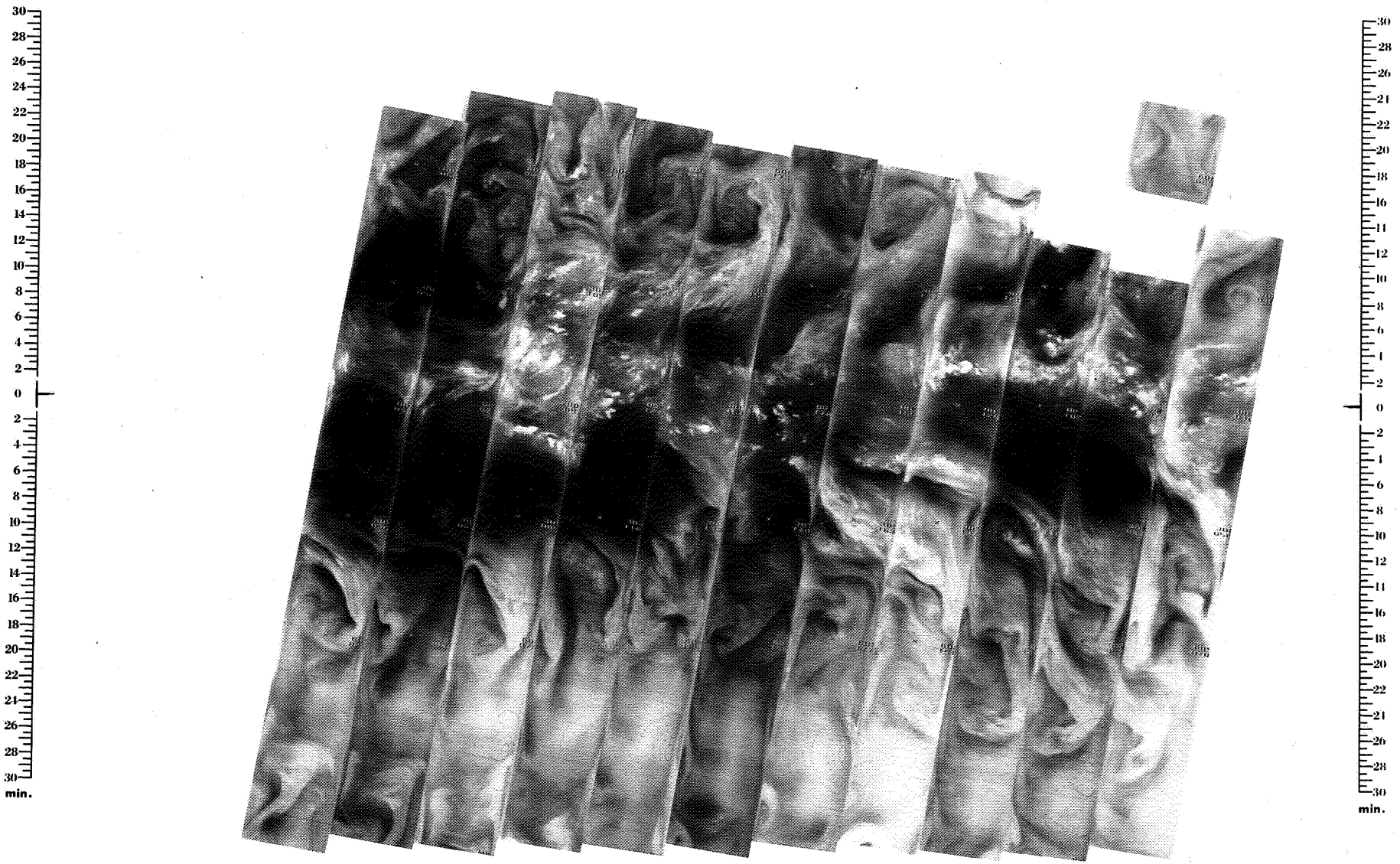

min.
min.
2519 2518 2517 2516 2515 2514 2513 2512 2511 2510 2509 2508 2507
16 JUNE 1973
11.5 μm

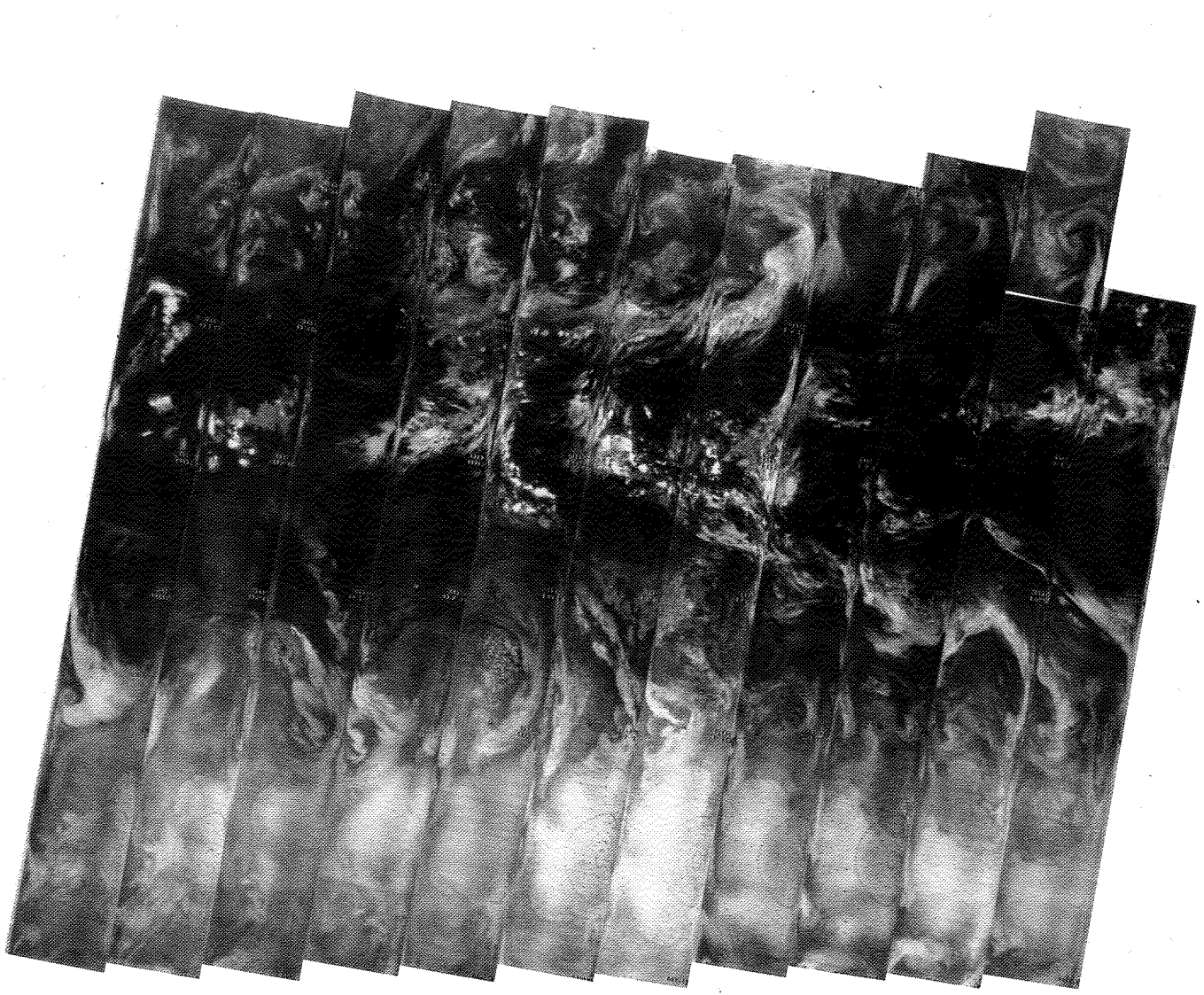

min.
min.
2519 2518 2517 2516 2515 2514 2513 2512 2511 2510 2509 2508 2507
16 JUNE 1973
6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2532 2531 2530 2529 2528 2527 2526 2525 2524 2523 2522 2521 2520
17 JUNE 1973
11.5 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2532 2531 2530 2529 2528 2527 2526 2525 2524 2523 2522 2521 2520
17 JUNE 1973
6.7 μm


min
min.
2546 2545 2544 2543 2542 2541 2540 2539 2538 2537 2536 2535 2534 2533
18 JUNE 1973
11.5 μm

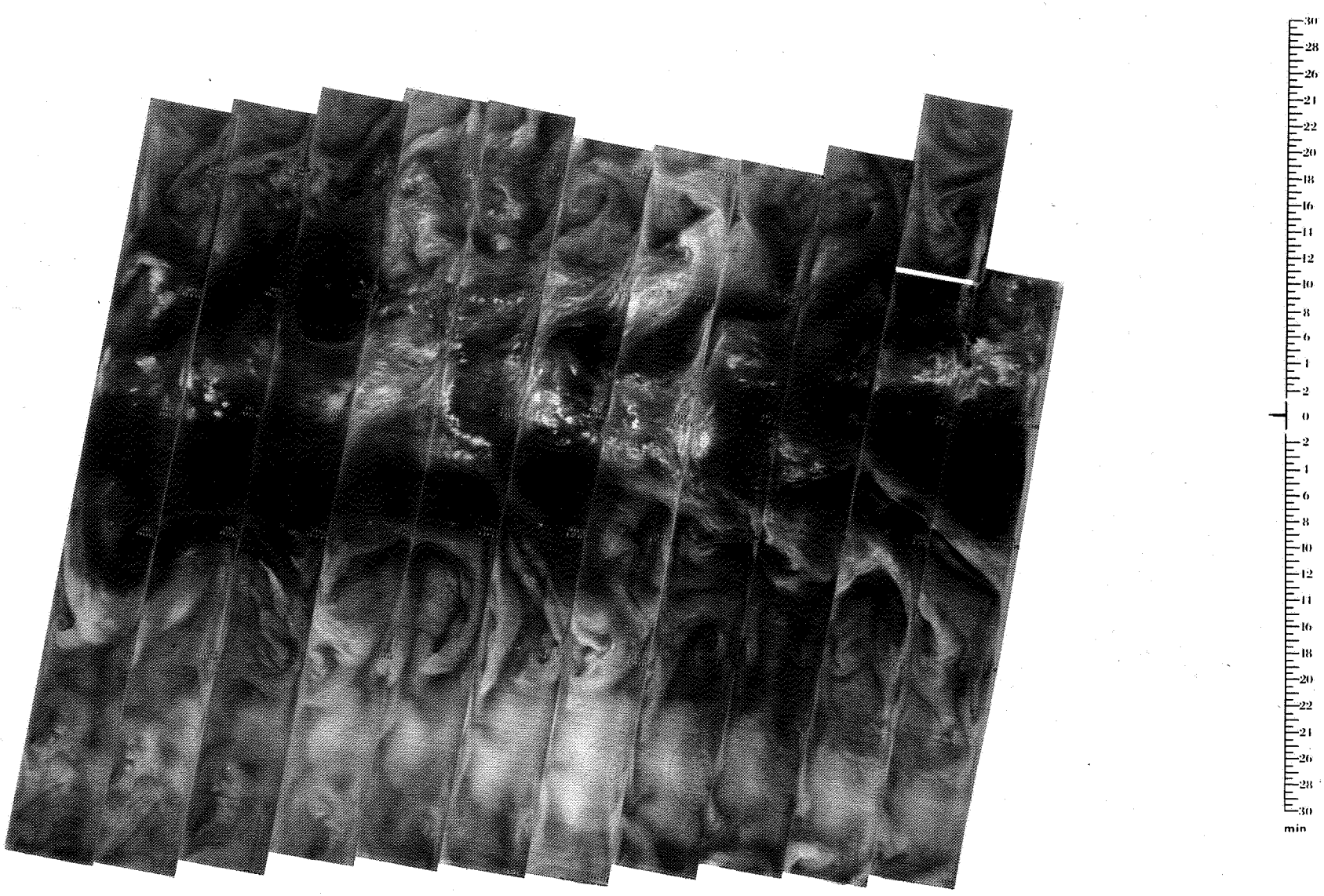

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min.
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18 JUNE 1973
6.7 μm



2559 2558 2557 2556 2555 2554 2553 2552 2551 2550 2549 2548 2547

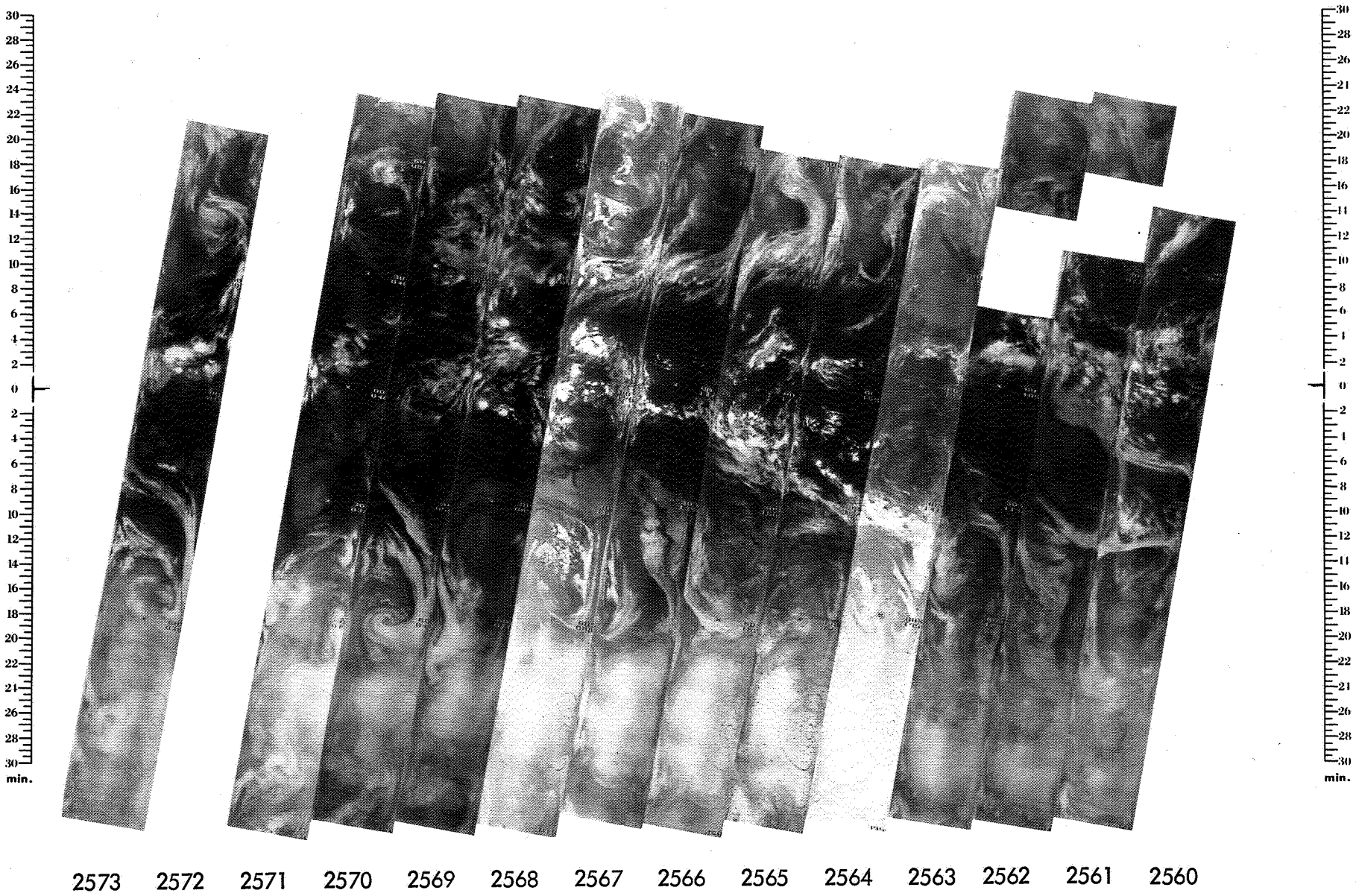
19 JUNE 1973

11.5 μm



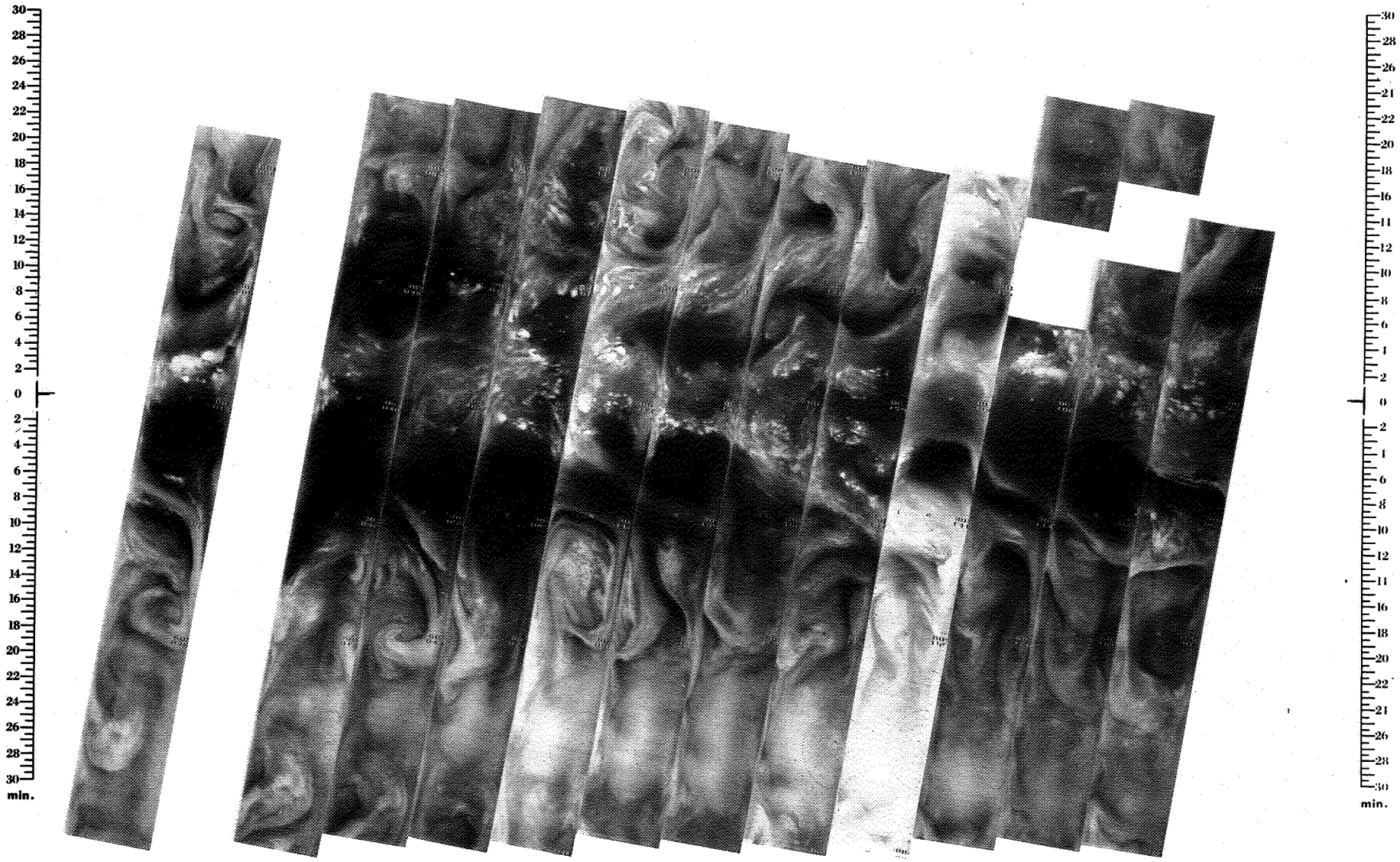
19 JUNE 1973

6.7 μm



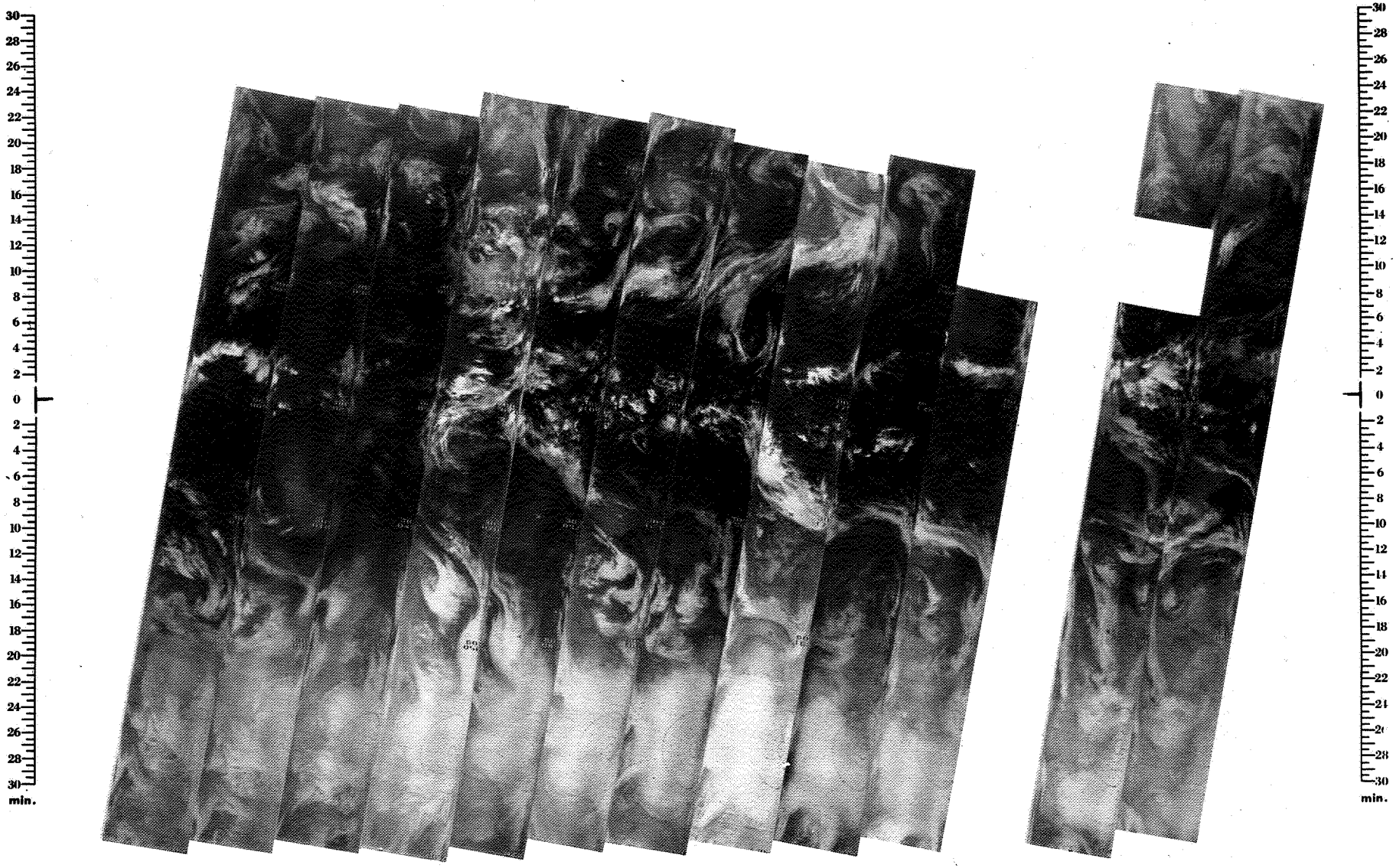
20 JUNE 1973

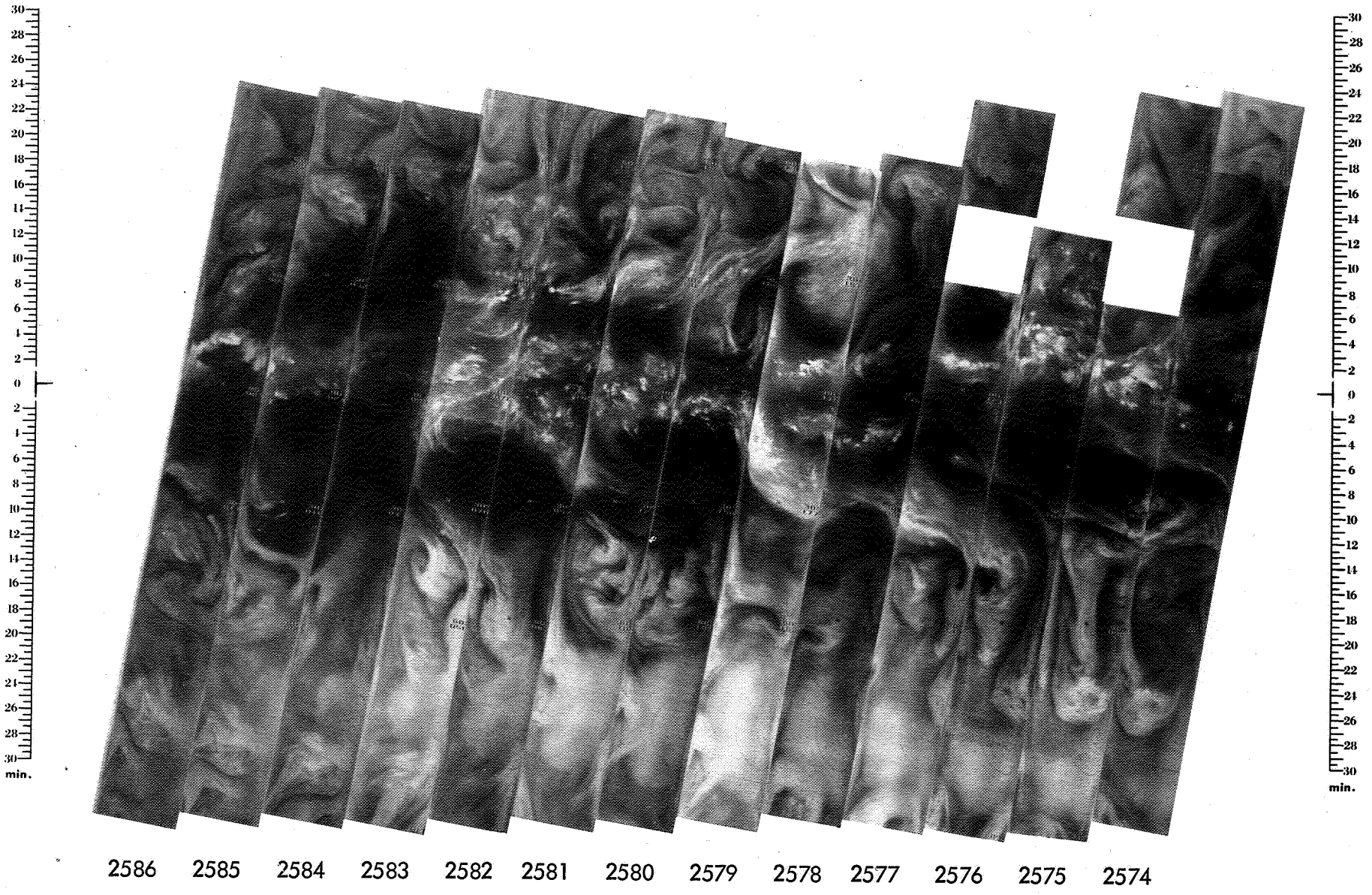
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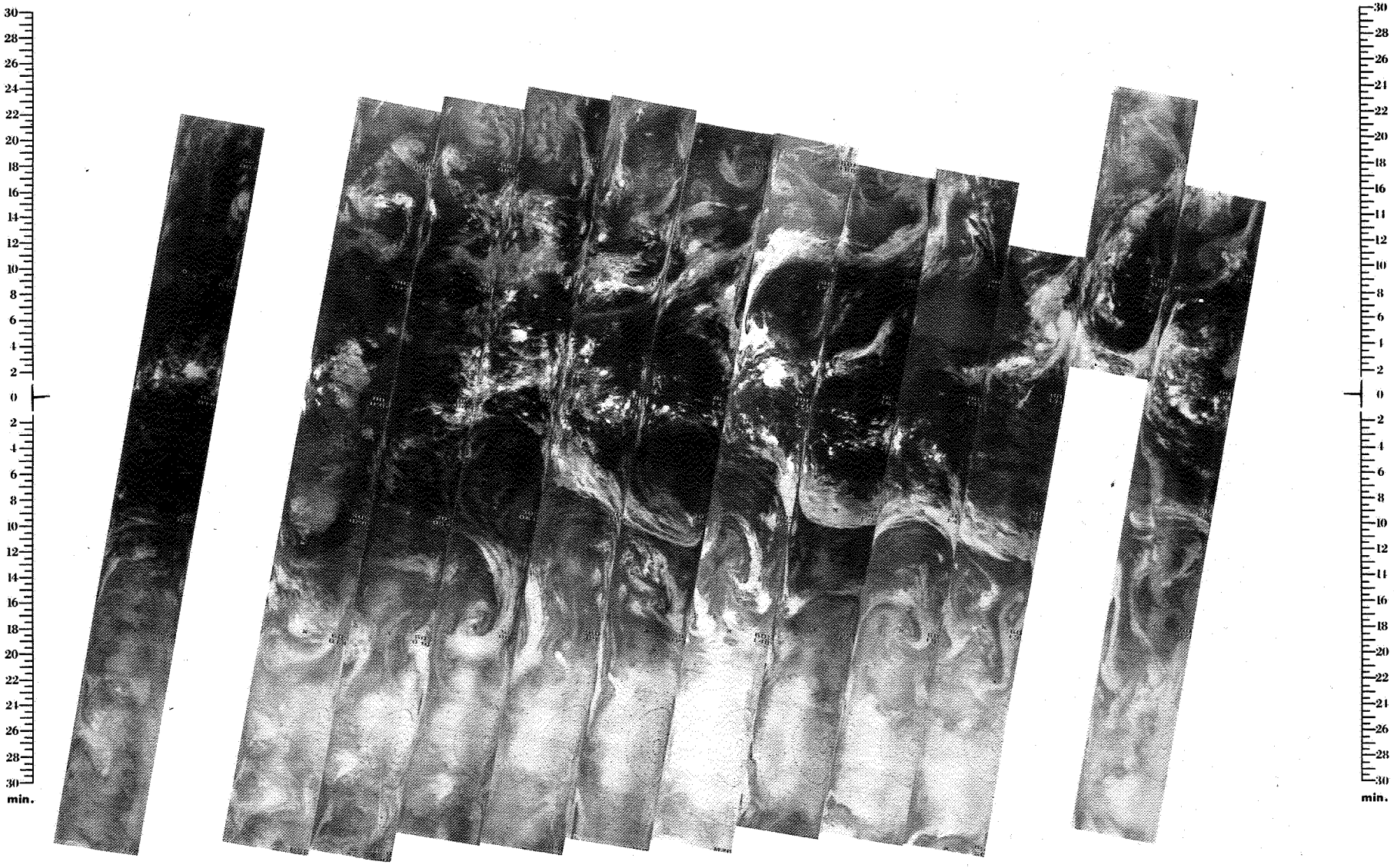


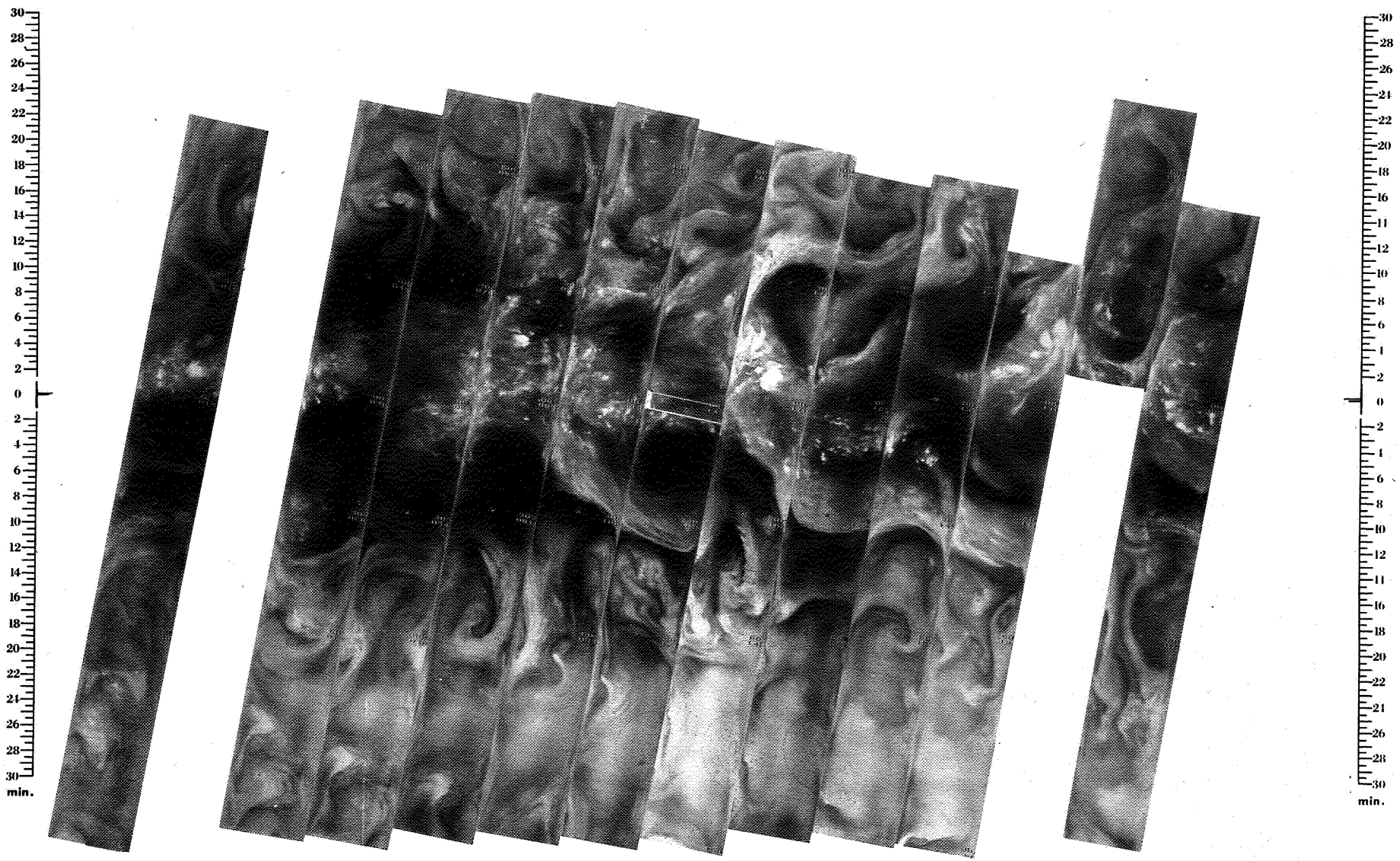
20 JUNE 1973

6.7 μm


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min.
2586 2585 2584 2583 2582 2581 2580 2579 2578 2577 2576 2575 2574
21 JUNE 1973
11.5 μm

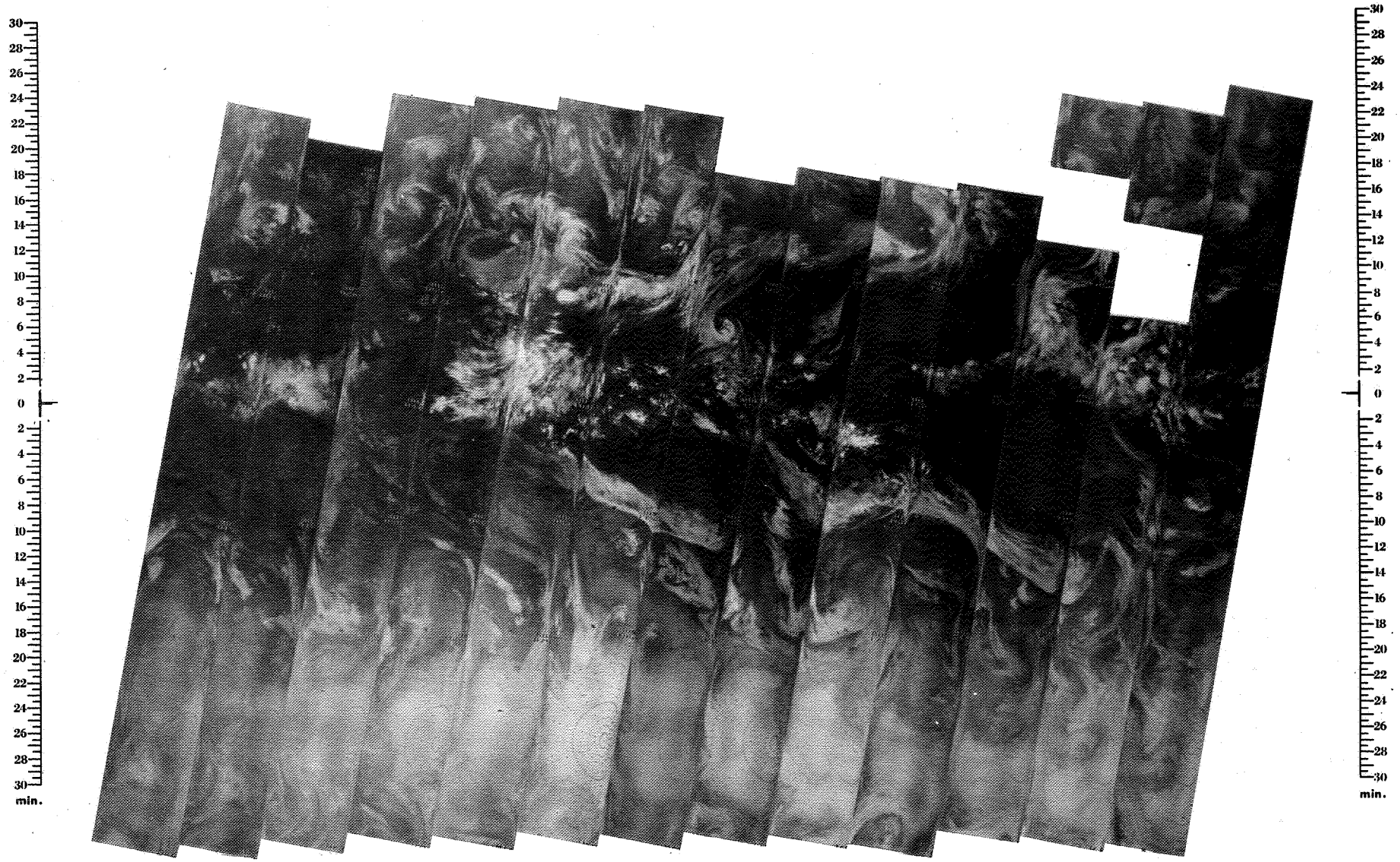

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min.
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21 JUNE 1973
6.7 μm

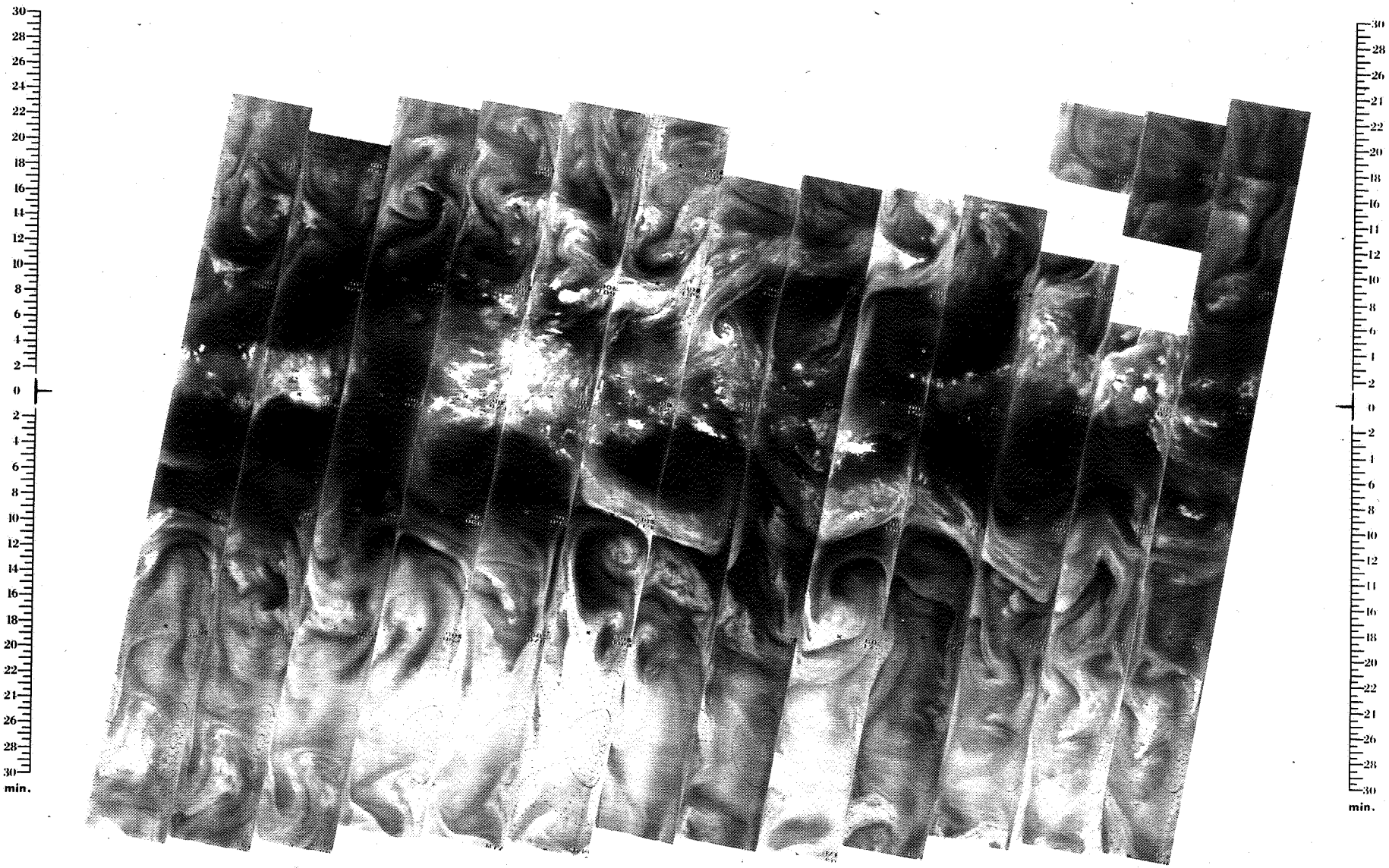

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2600 2599 2598 2597 2596 2595 2594 2593 2592 2591 2590 2589 2588 2587
22 JUNE 1973
11.5 μm



22 JUNE 1973

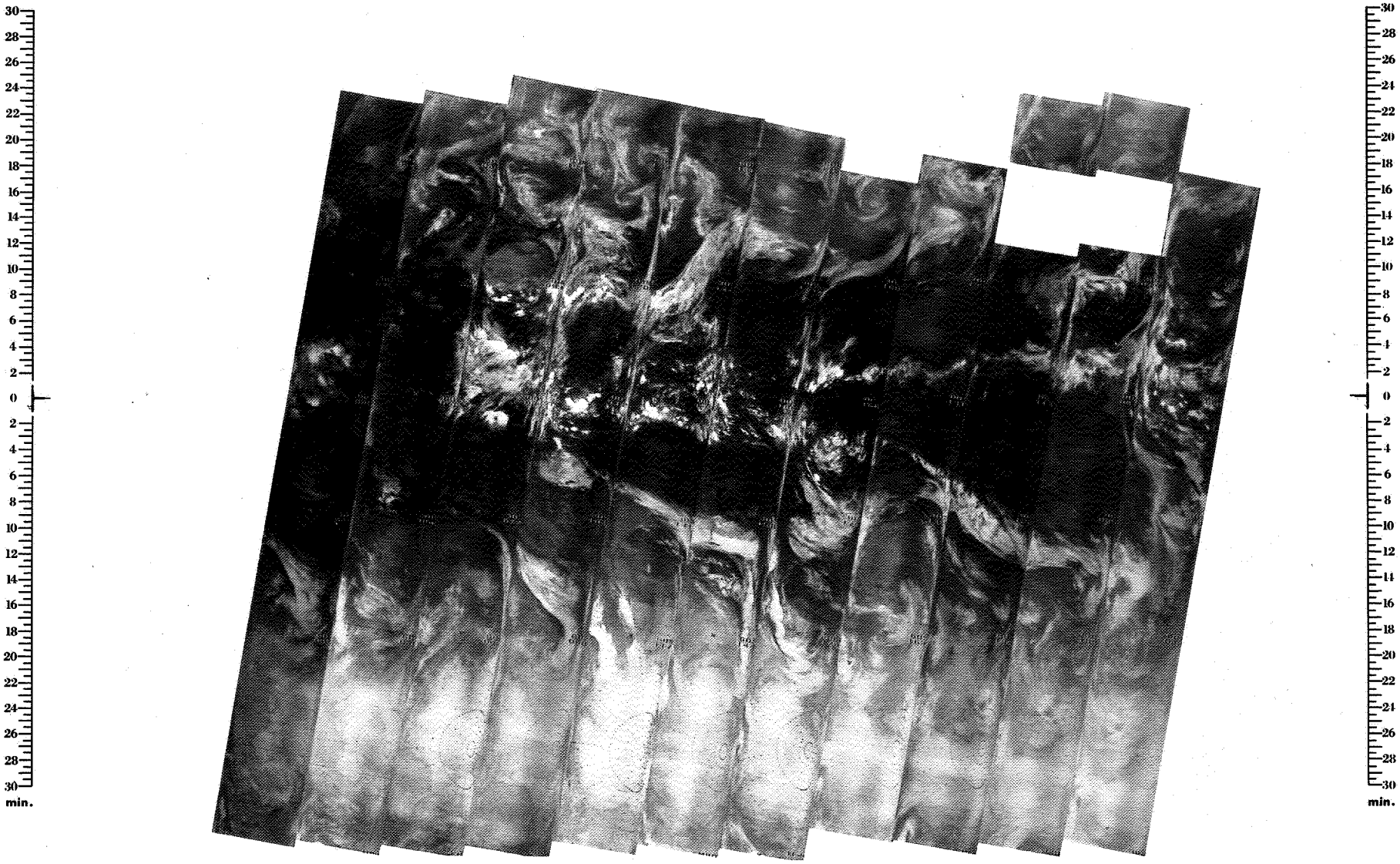
6.7 μm


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min.
2613 2612 2611 2610 2609 2608 2607 2606 2605 2604 2603 2602 2601
23 JUNE 1973
11.5 μm



23 JUNE 1973

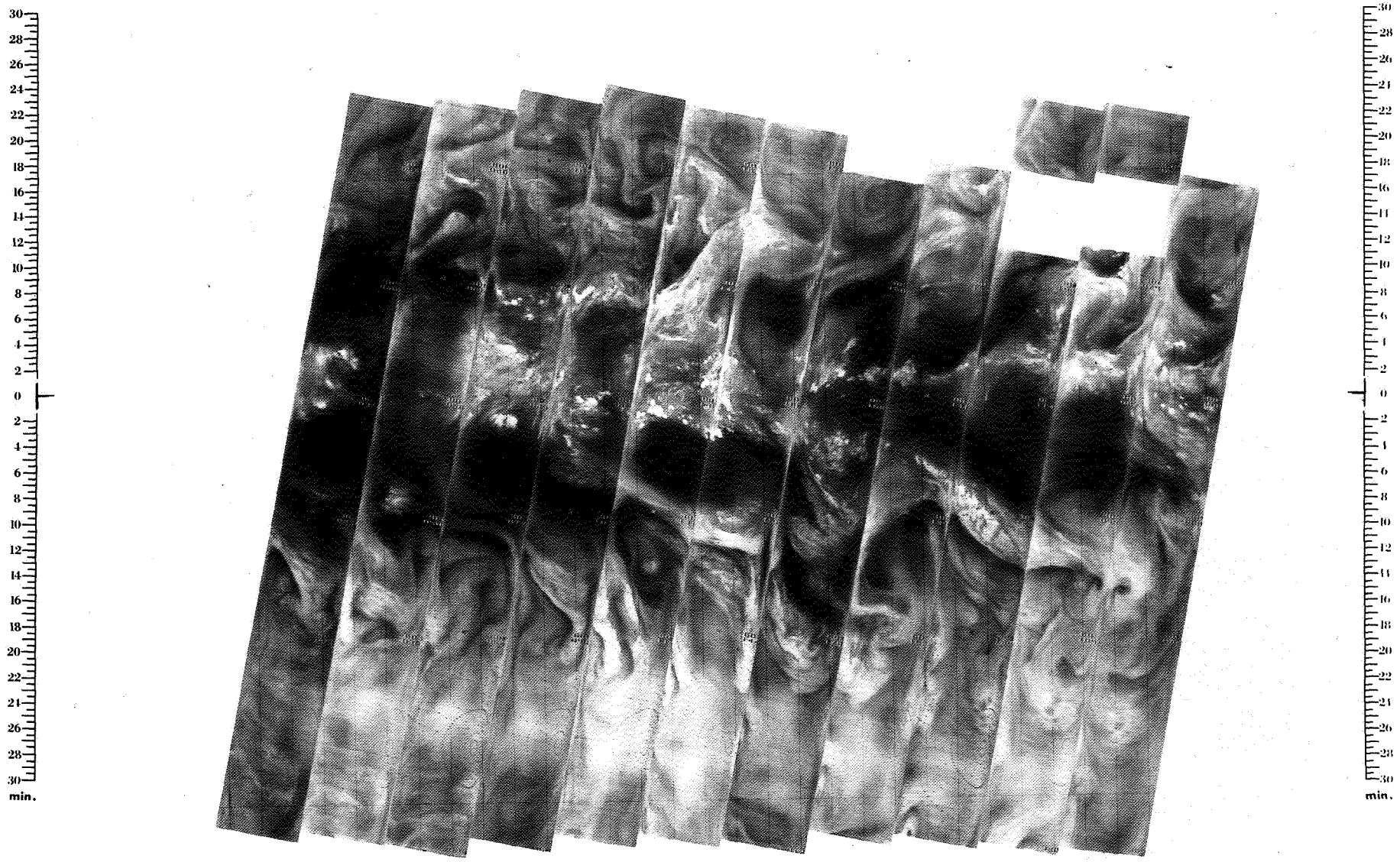
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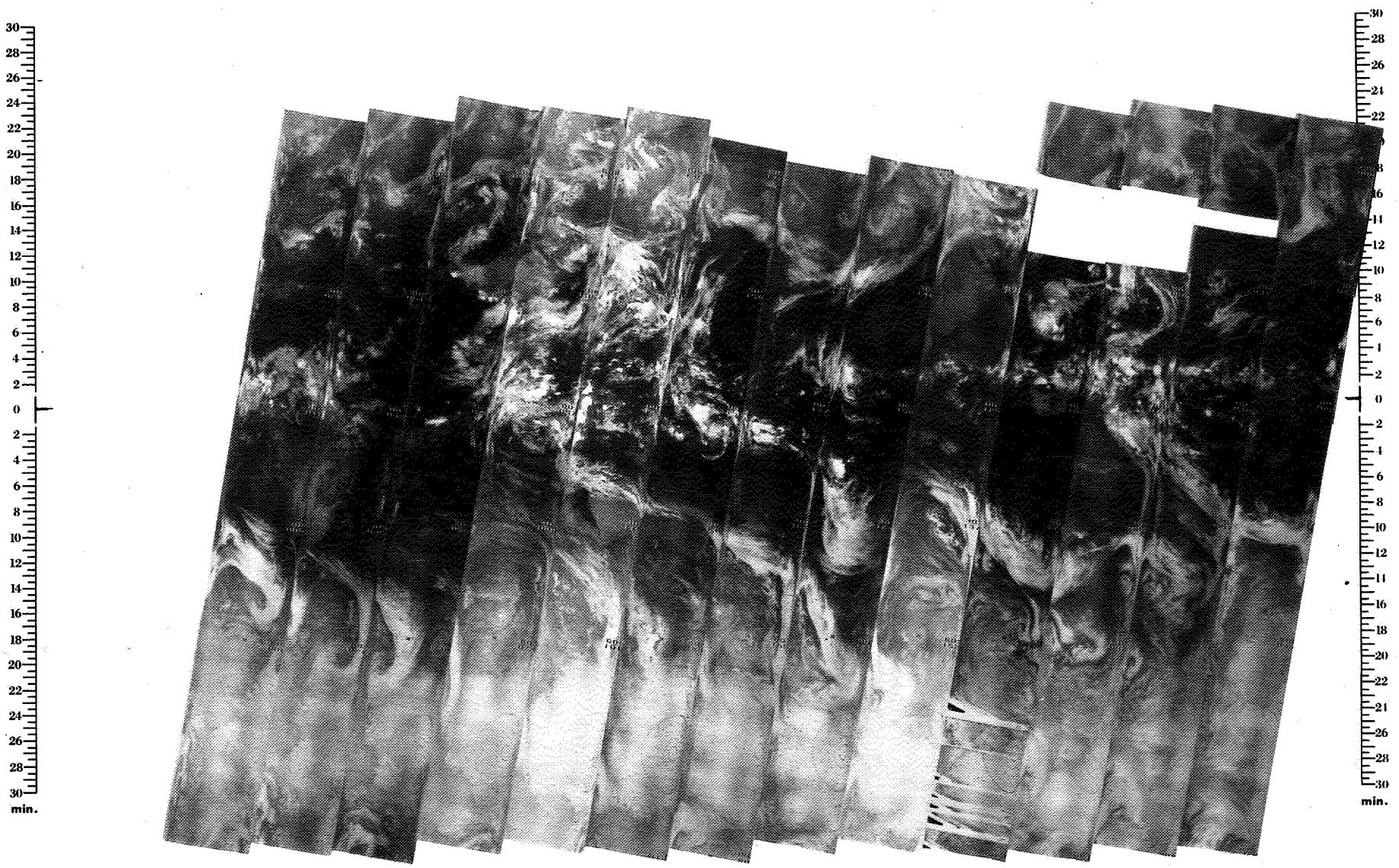


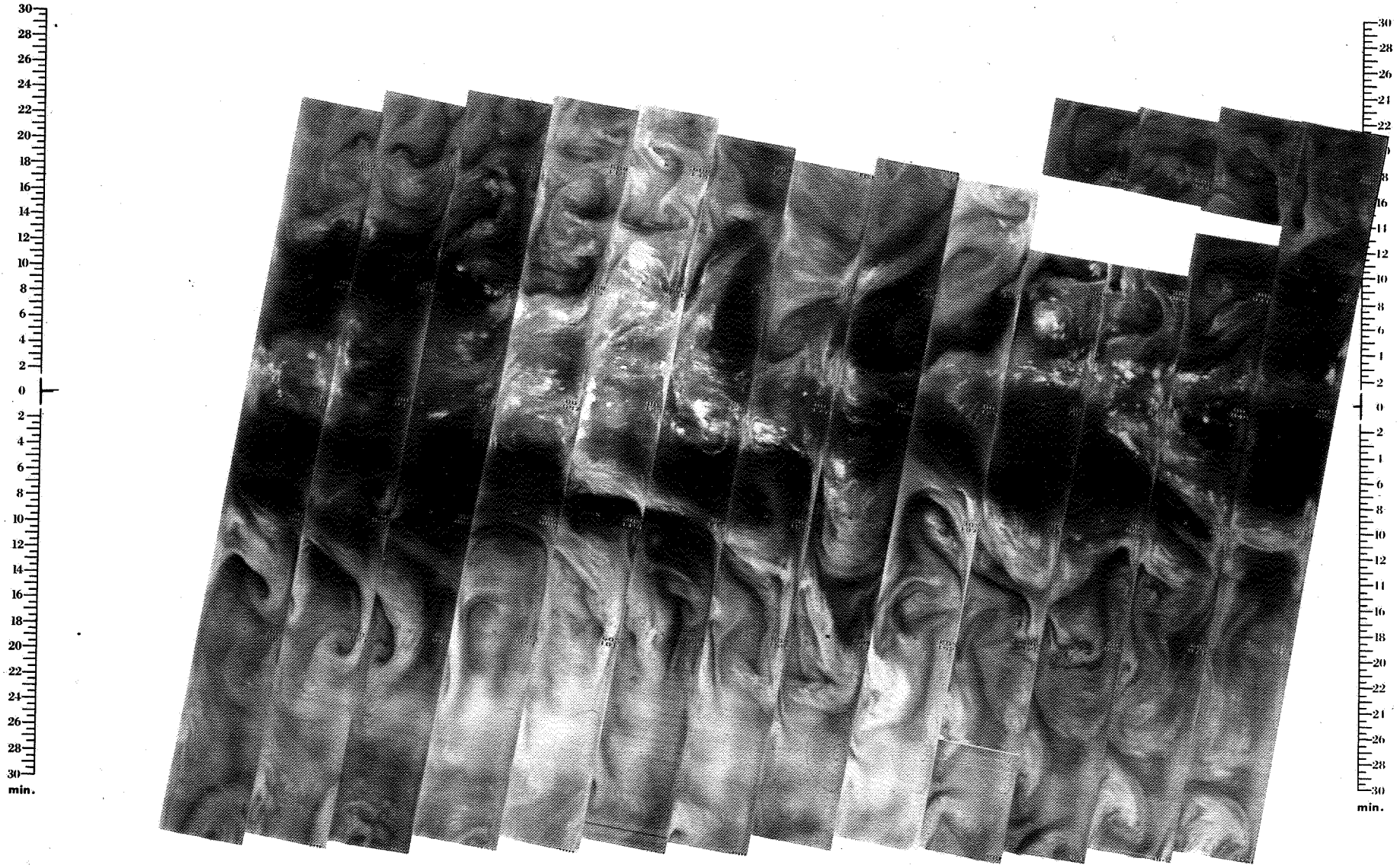
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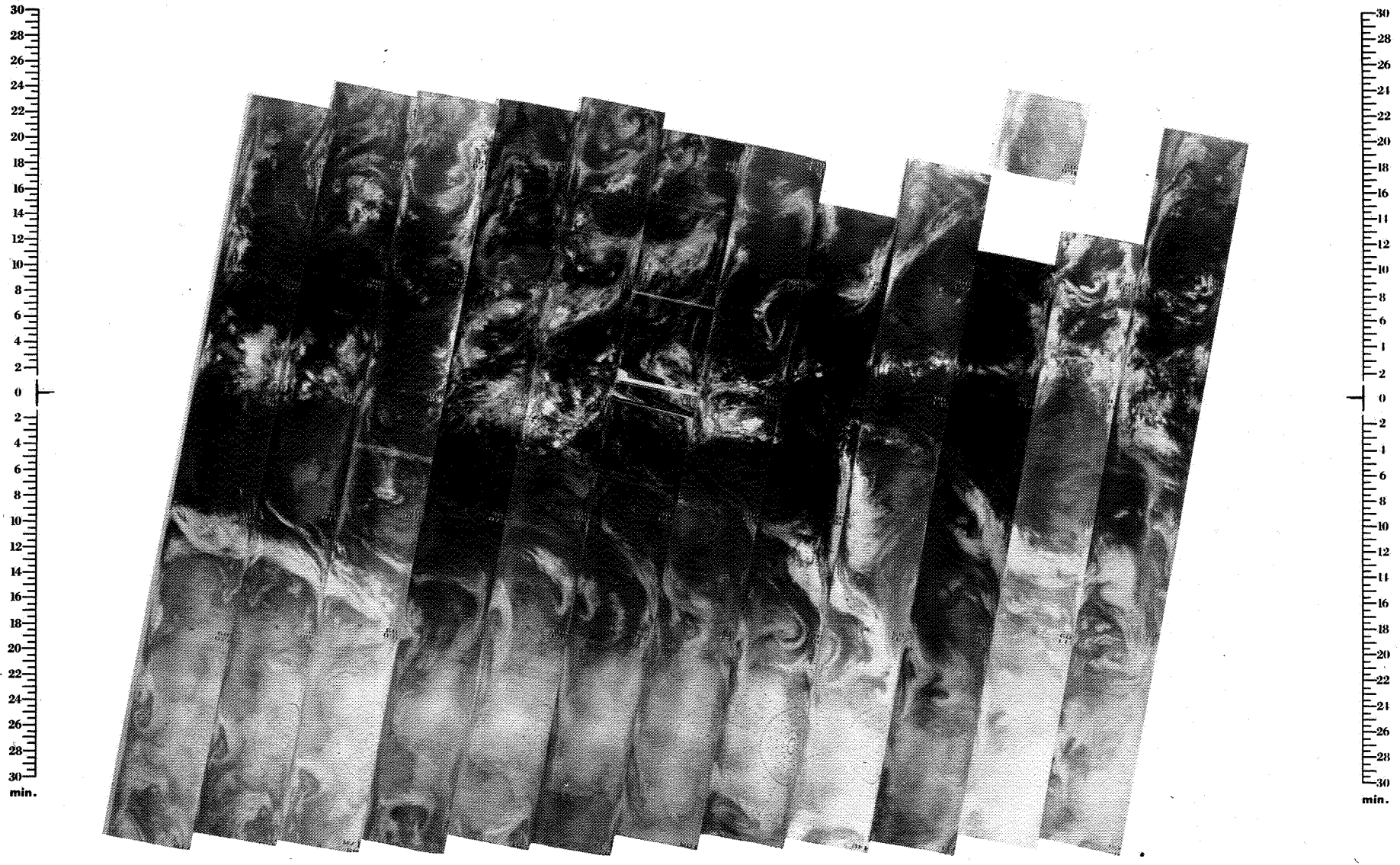
24 JUNE 1973

11.5 μm


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min.
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24 JUNE 1973
6.7 μm

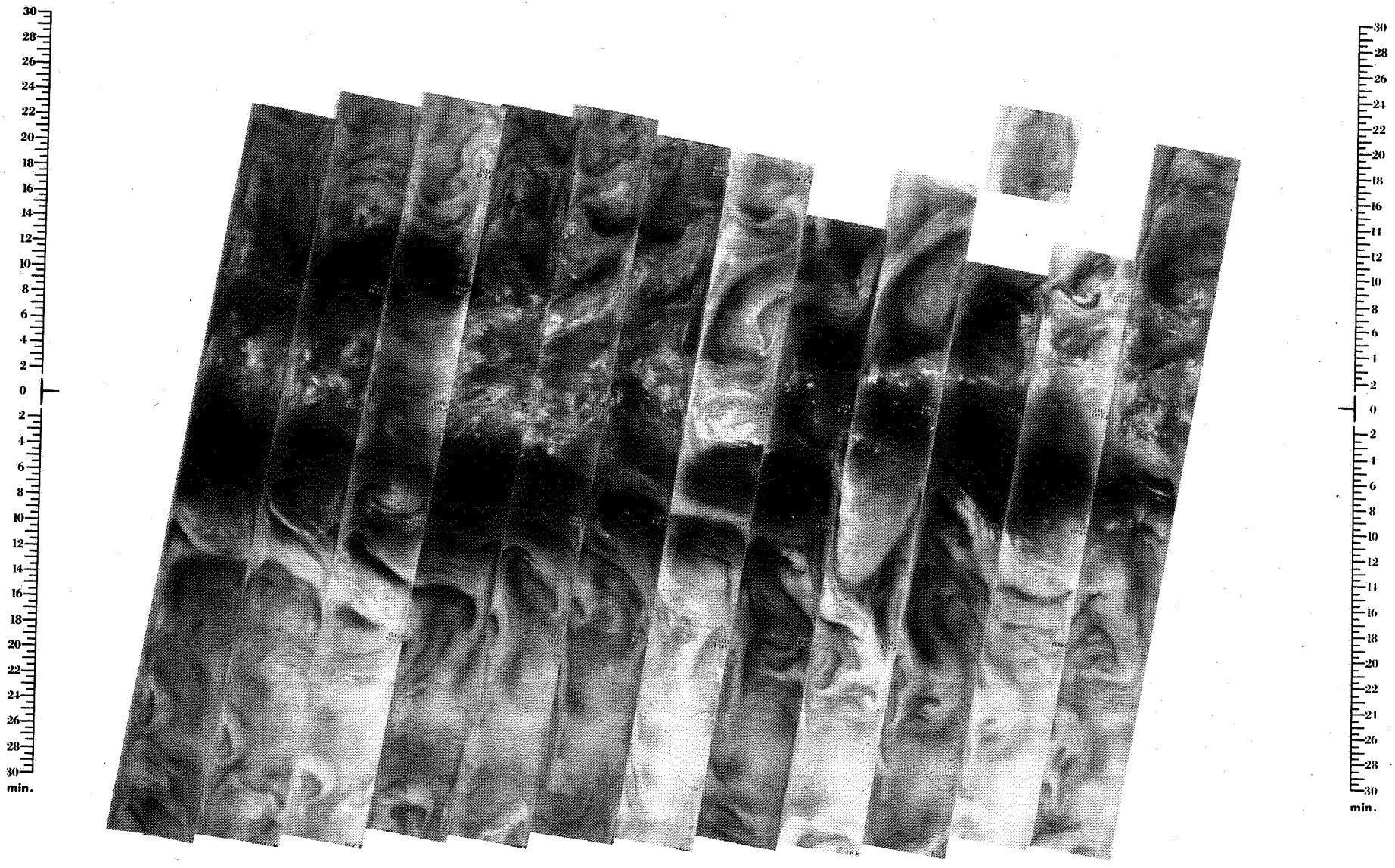

min.
min.
2640
2639
2638
2637
2636
2635
2634
2633
2632
2631
2630
2629
2628
2627
25 JUNE 1973
11.5 μm

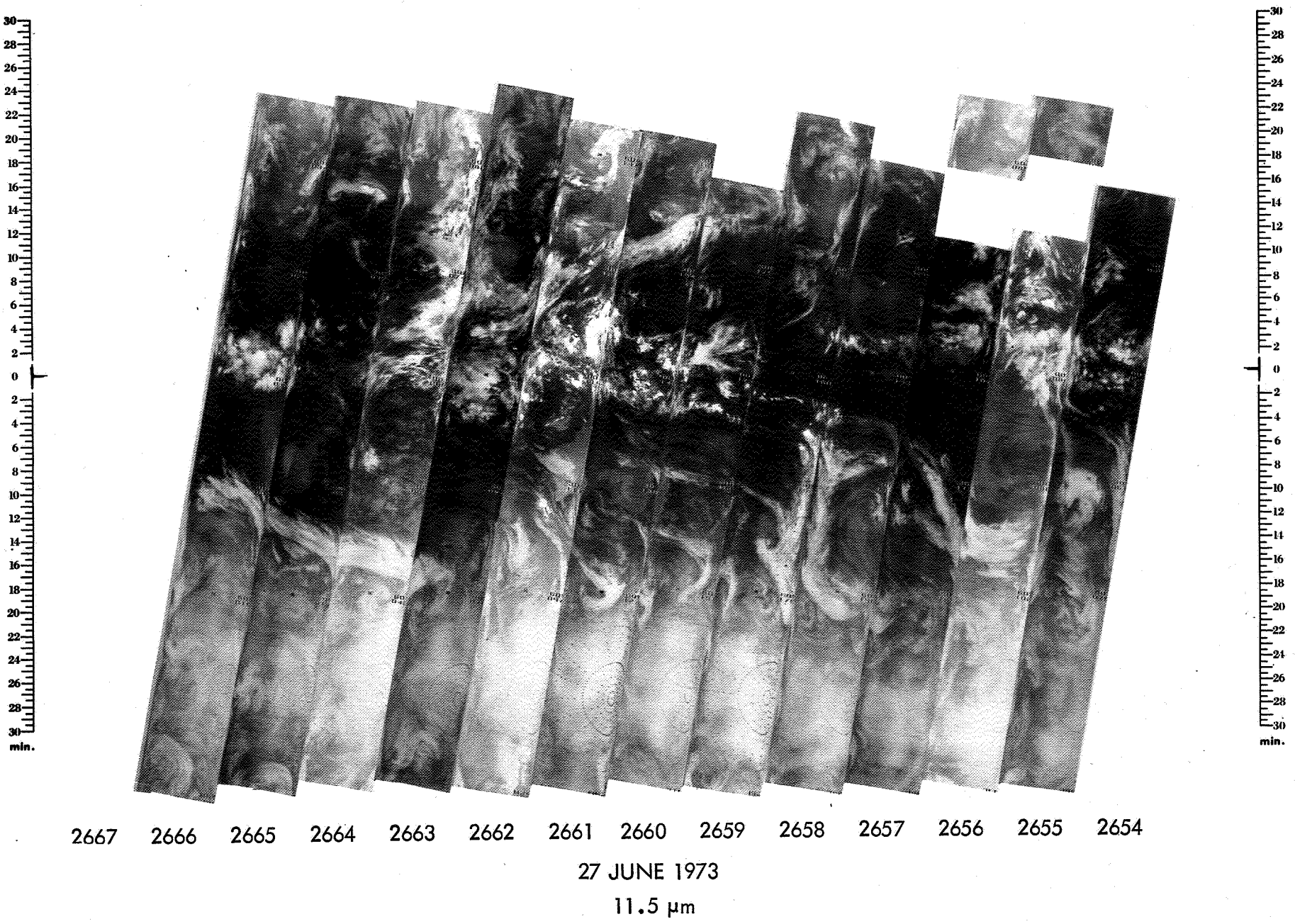

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2640 2639 2638 2637 2636 2635 2634 2633 2632 2631 2630 2629 2628 2627
25 JUNE 1973
6.7 μm

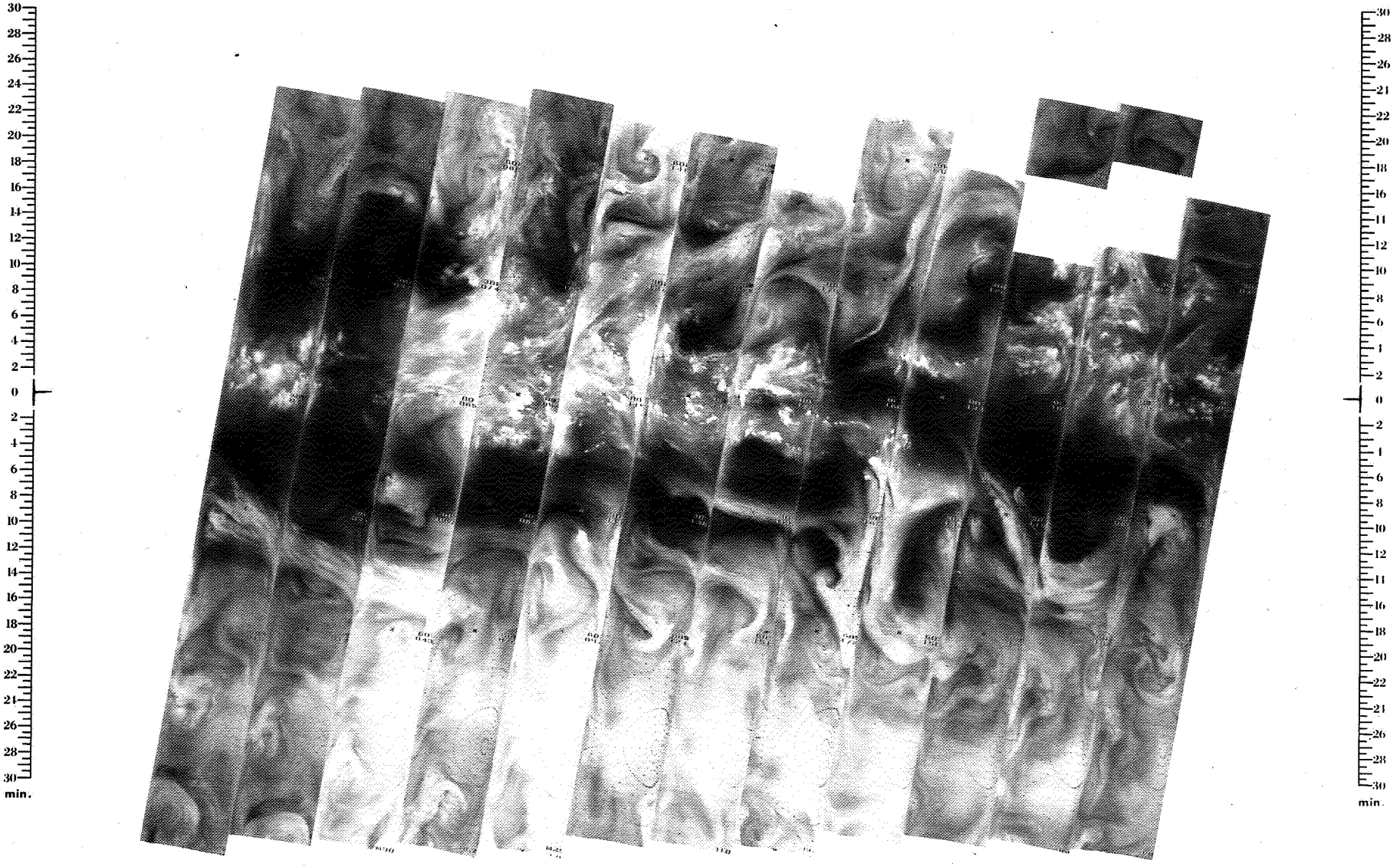


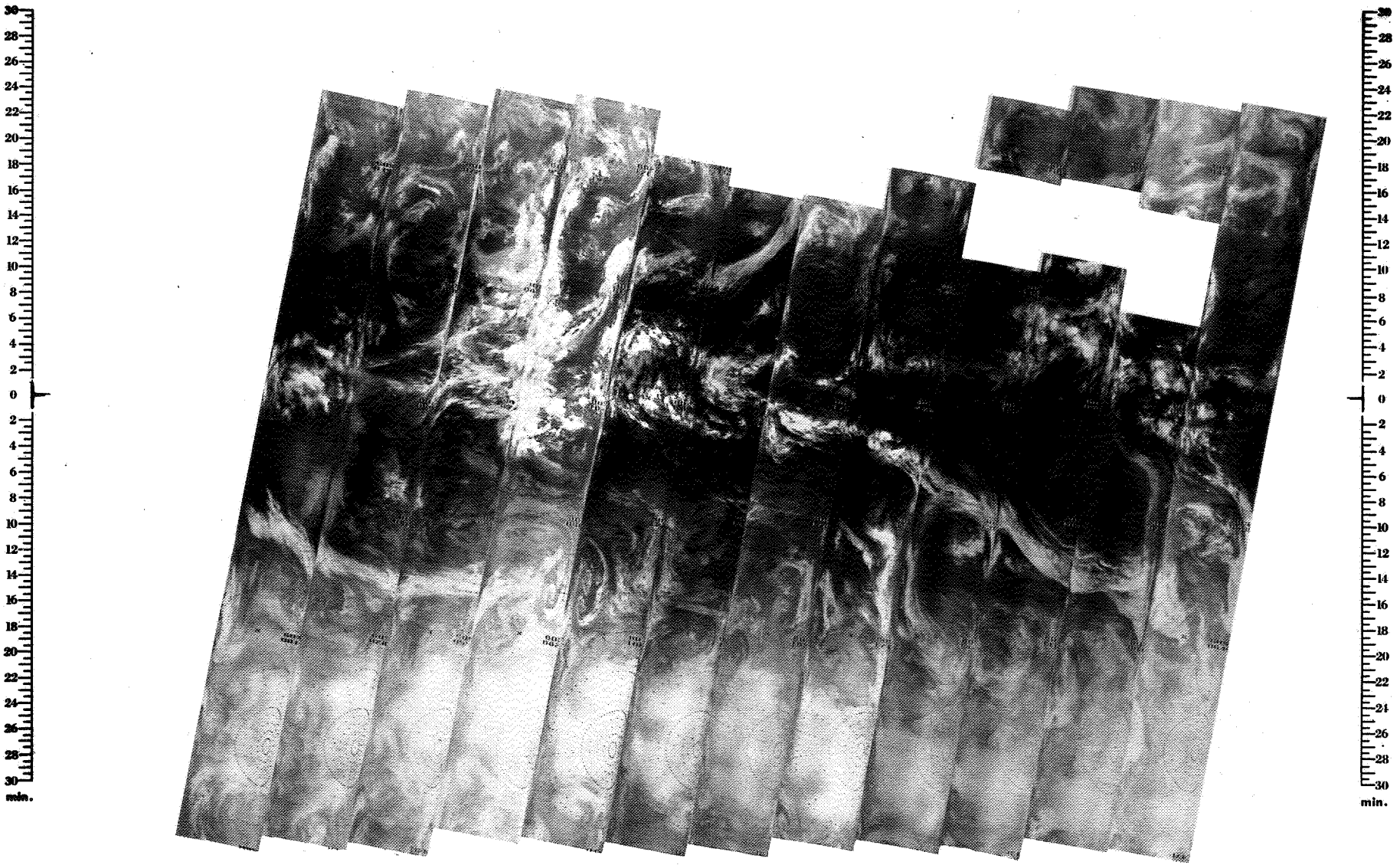
26 JUNE 1973

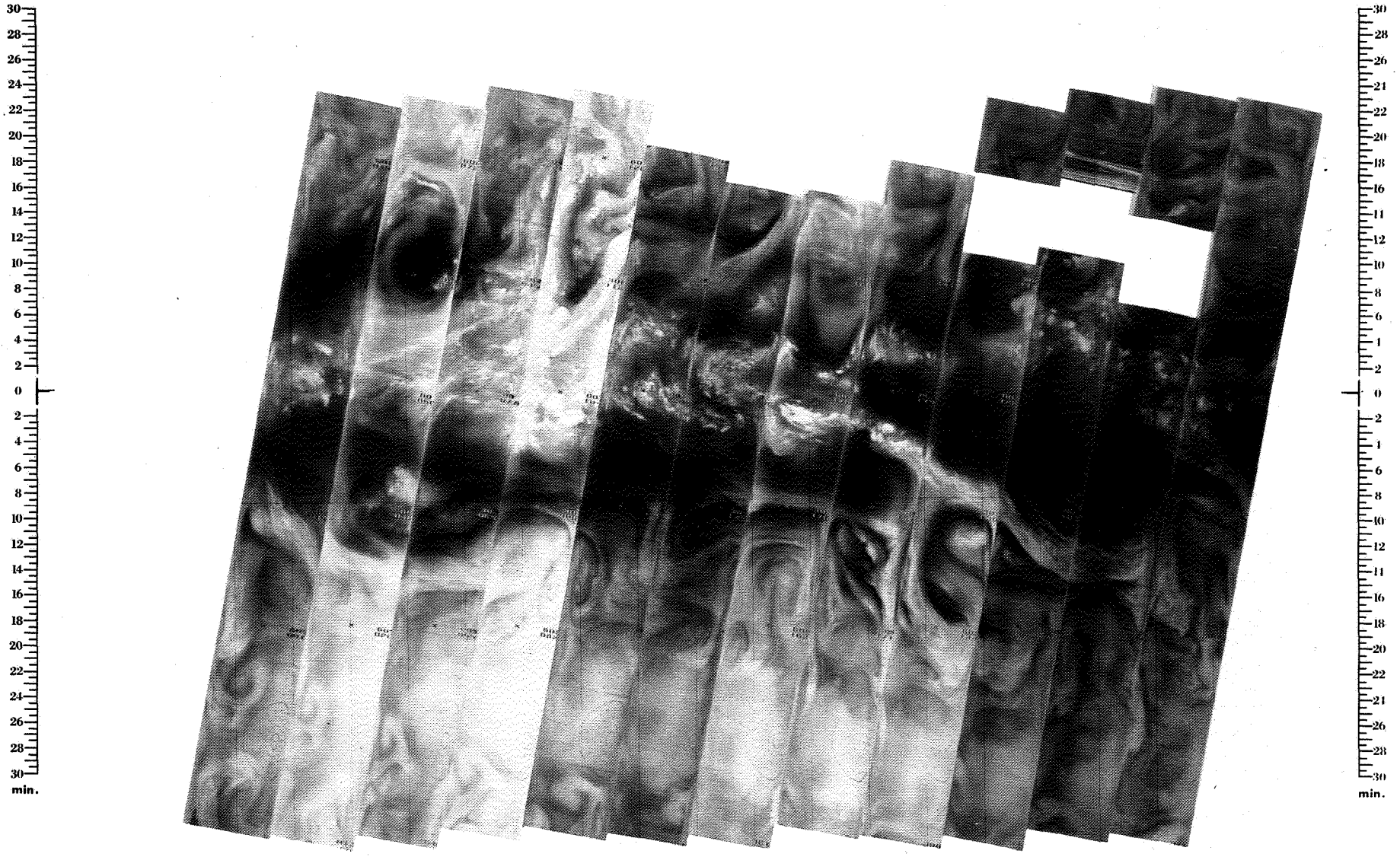
11.5 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2653 2652 2651 2650 2649 2648 2647 2646 2645 2644 2643 2642 2641
26 JUNE 1973
6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2667 2666 2665 2664 2663 2662 2661 2660 2659 2658 2657 2656 2655 2654
27 JUNE 1973
11.5 μm

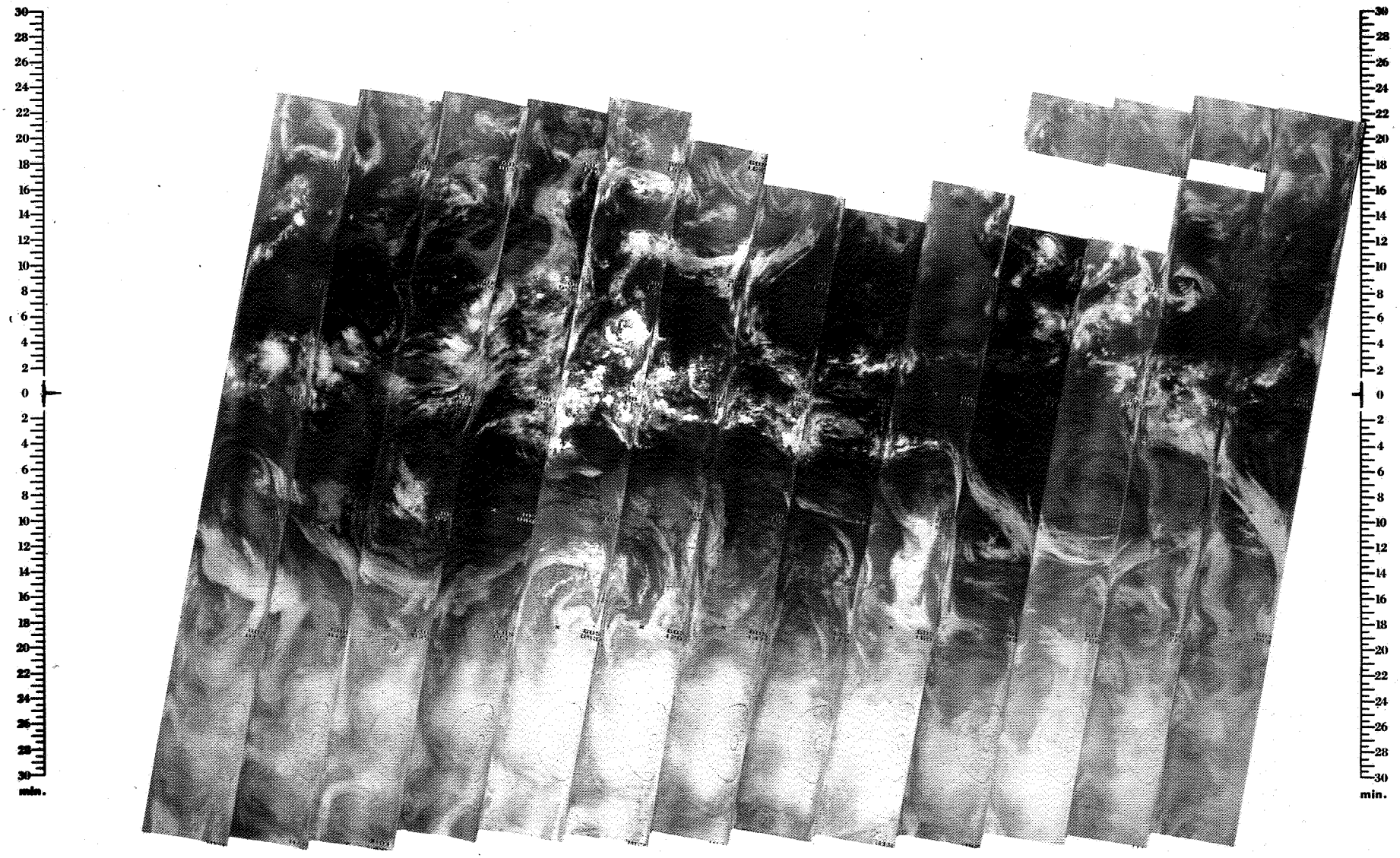

min.
min.
2667
2666
2665
2664
2663
2662
2661
2660
2659
2658
2657
2656
2655
2654
27 JUNE 1973
6.7 μm


min.
min.
2680 2679 2678 2677 2676 2675 2674 2673 2672 2671 2670 2669 2668
28 JUNE 1973
11.5 μm



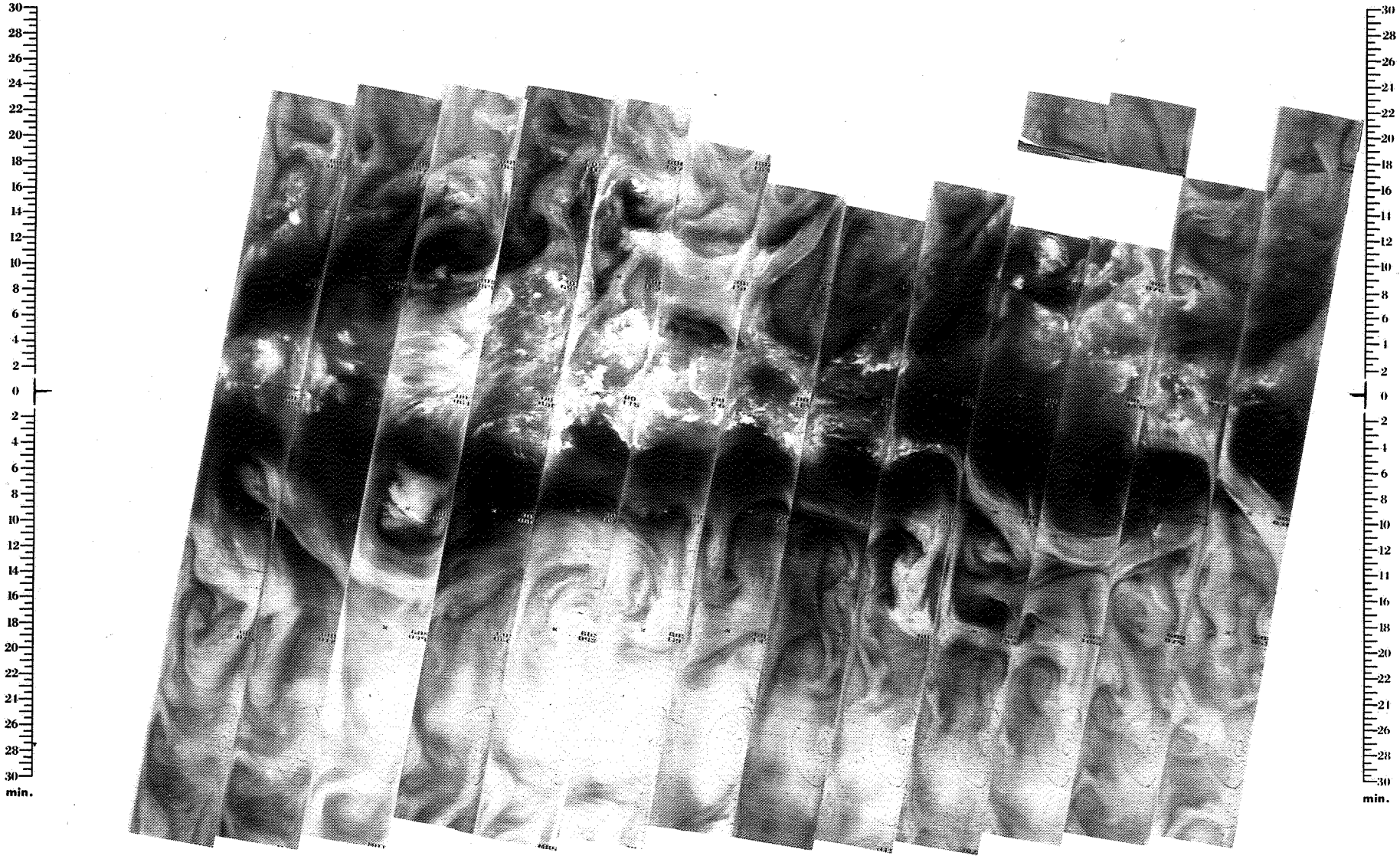
28 JUNE 1973

6.7 μm



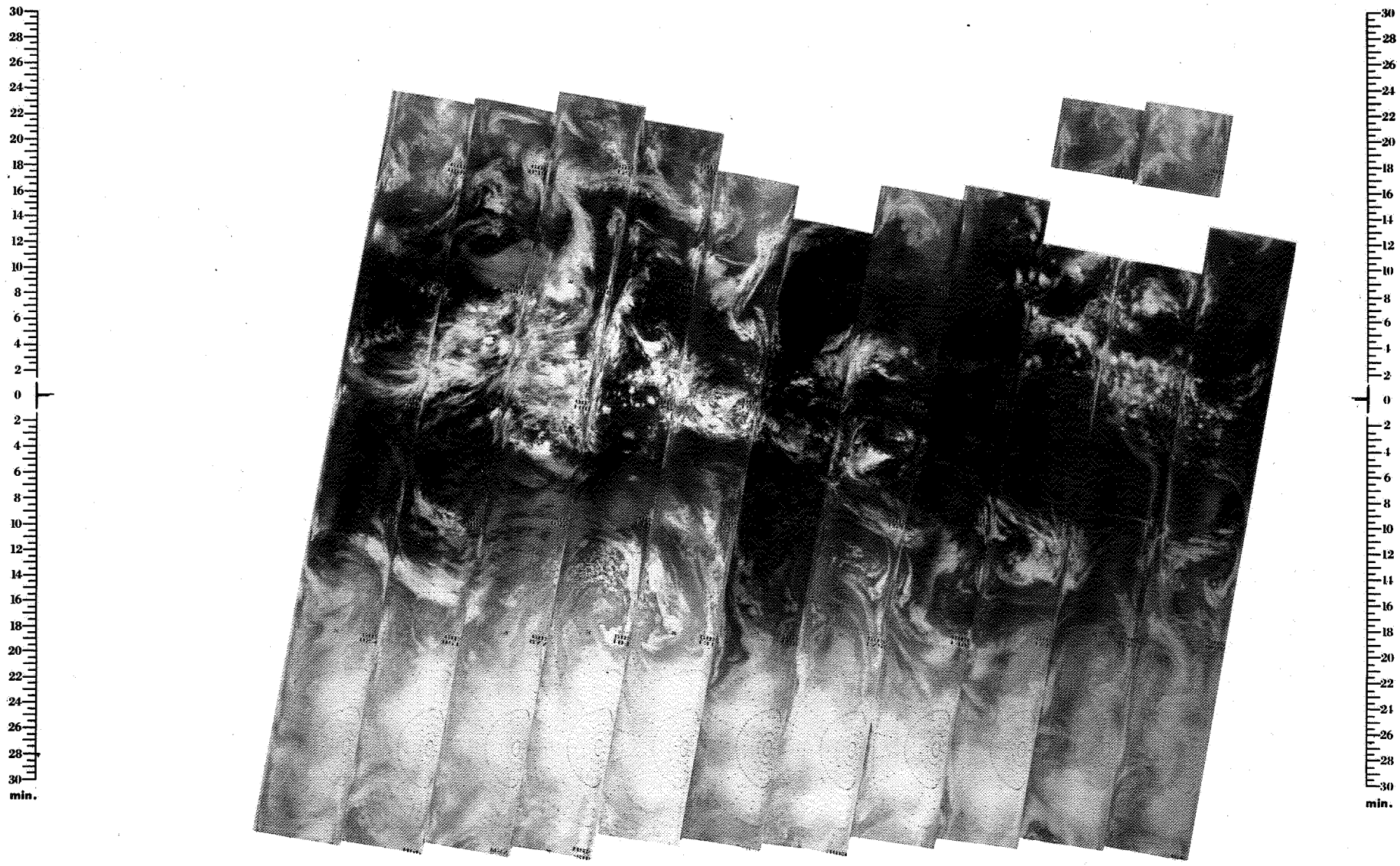
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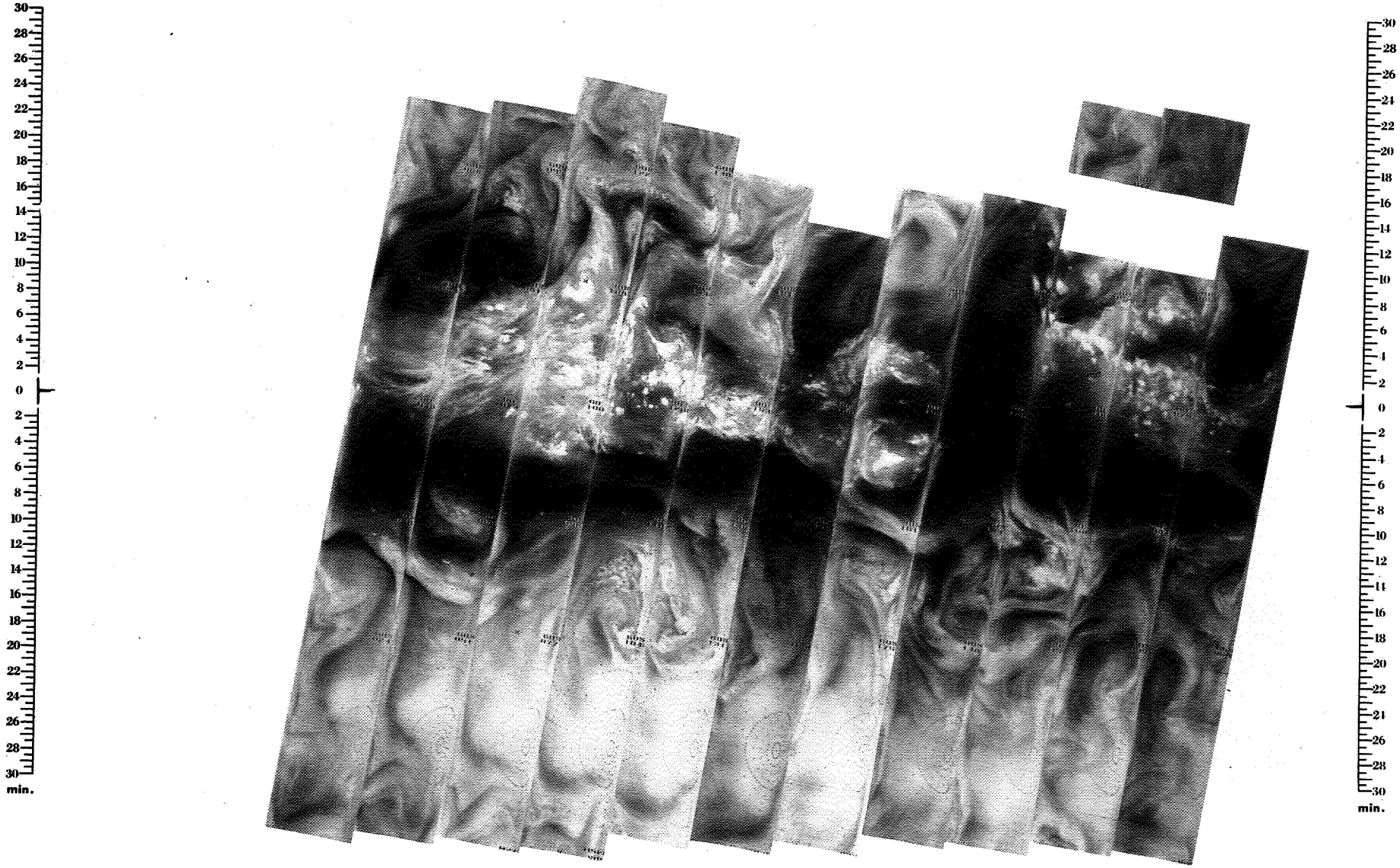
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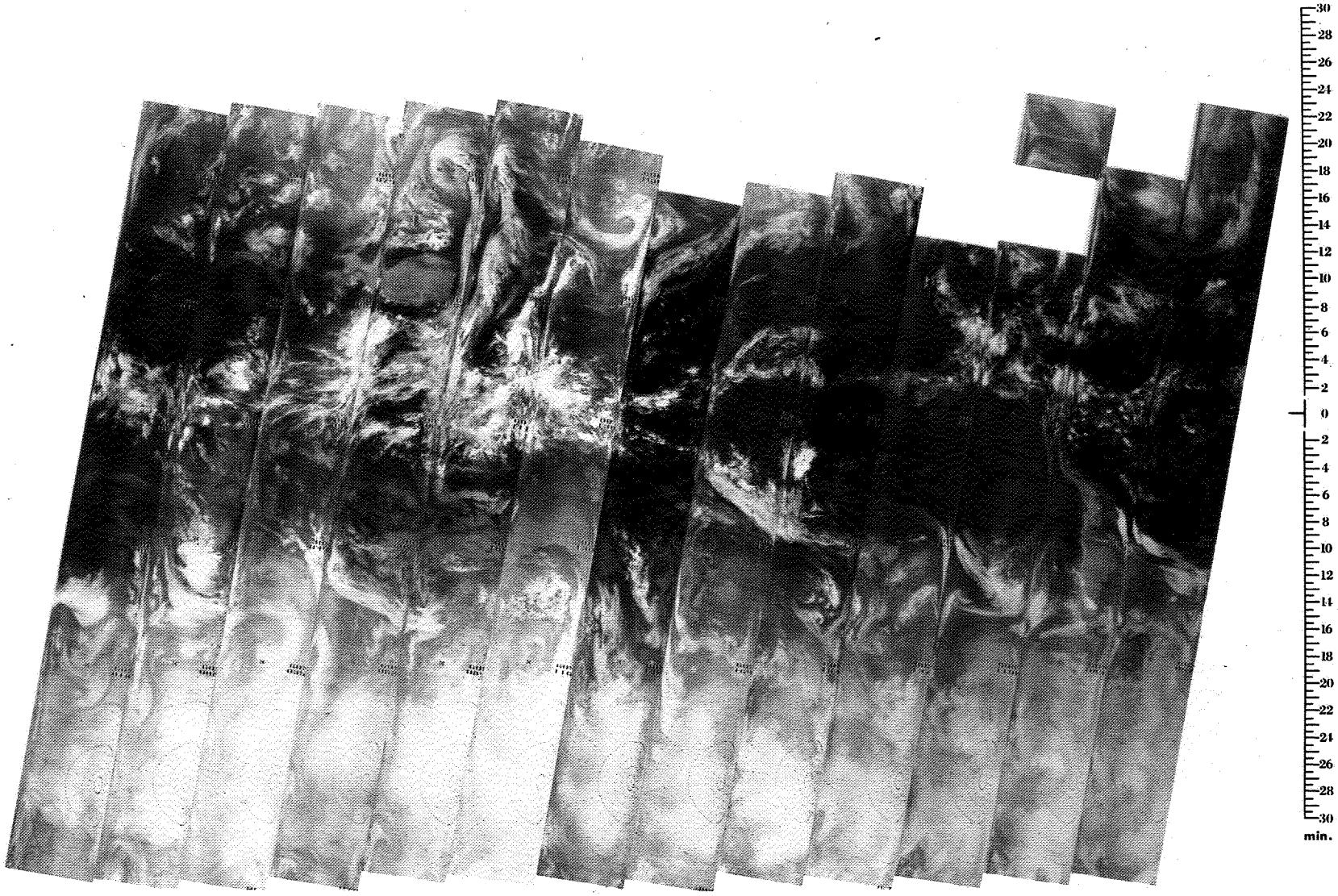


29 JUNE 1973

6.7 μm

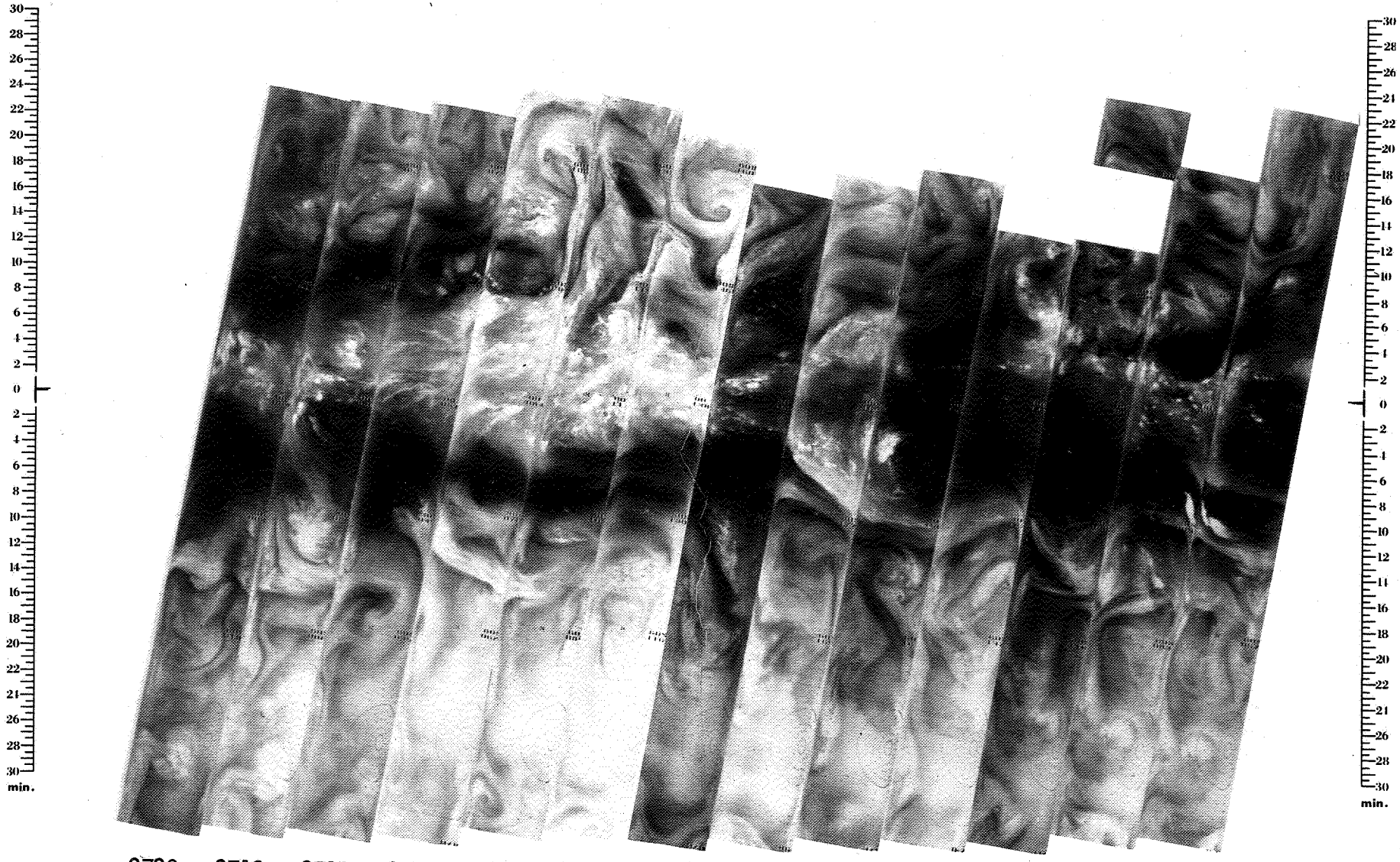

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min.
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2707 2706 2705 2704 2703 2702 2701 2700 2699 2698 2697 2696 2695
30 JUNE 1973
11.5 μm


min.
min.
2707 2706 2705 2704 2703 2702 2701 2700 2699 2698 2697 2696 2695
30 JUNE 1973
6.7 μm



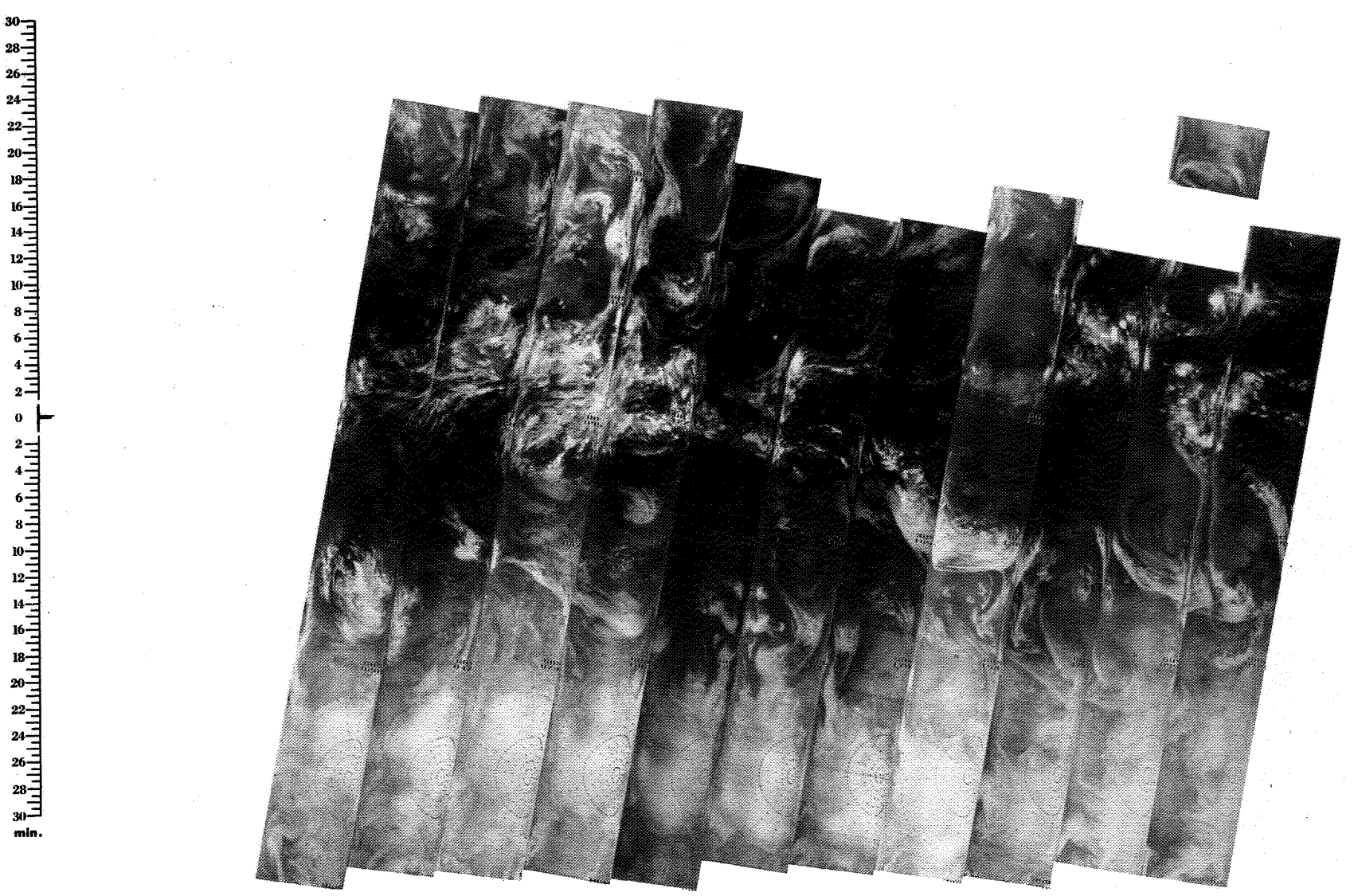
1 JULY 1973

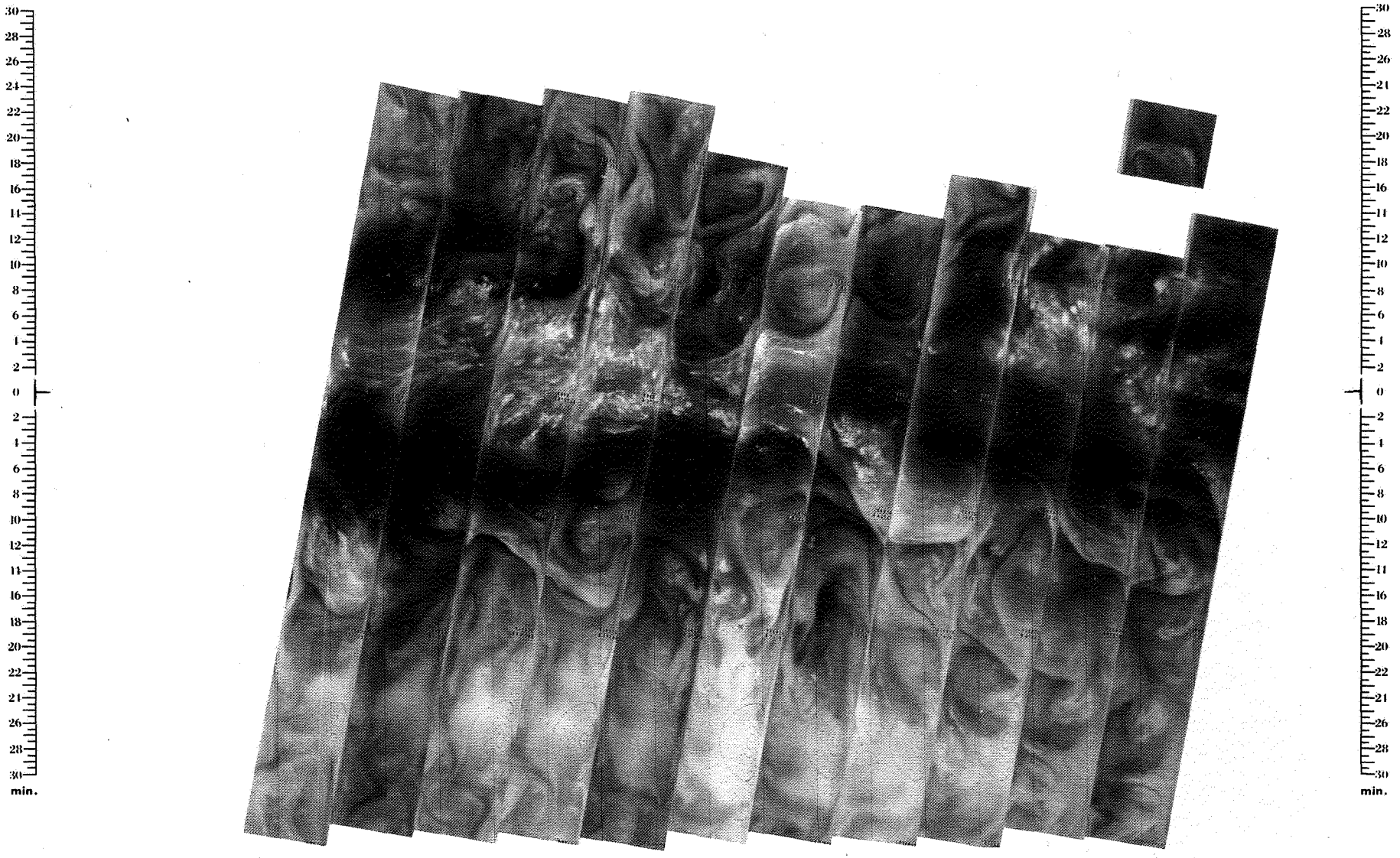
11.5 μm



1 JULY 1973

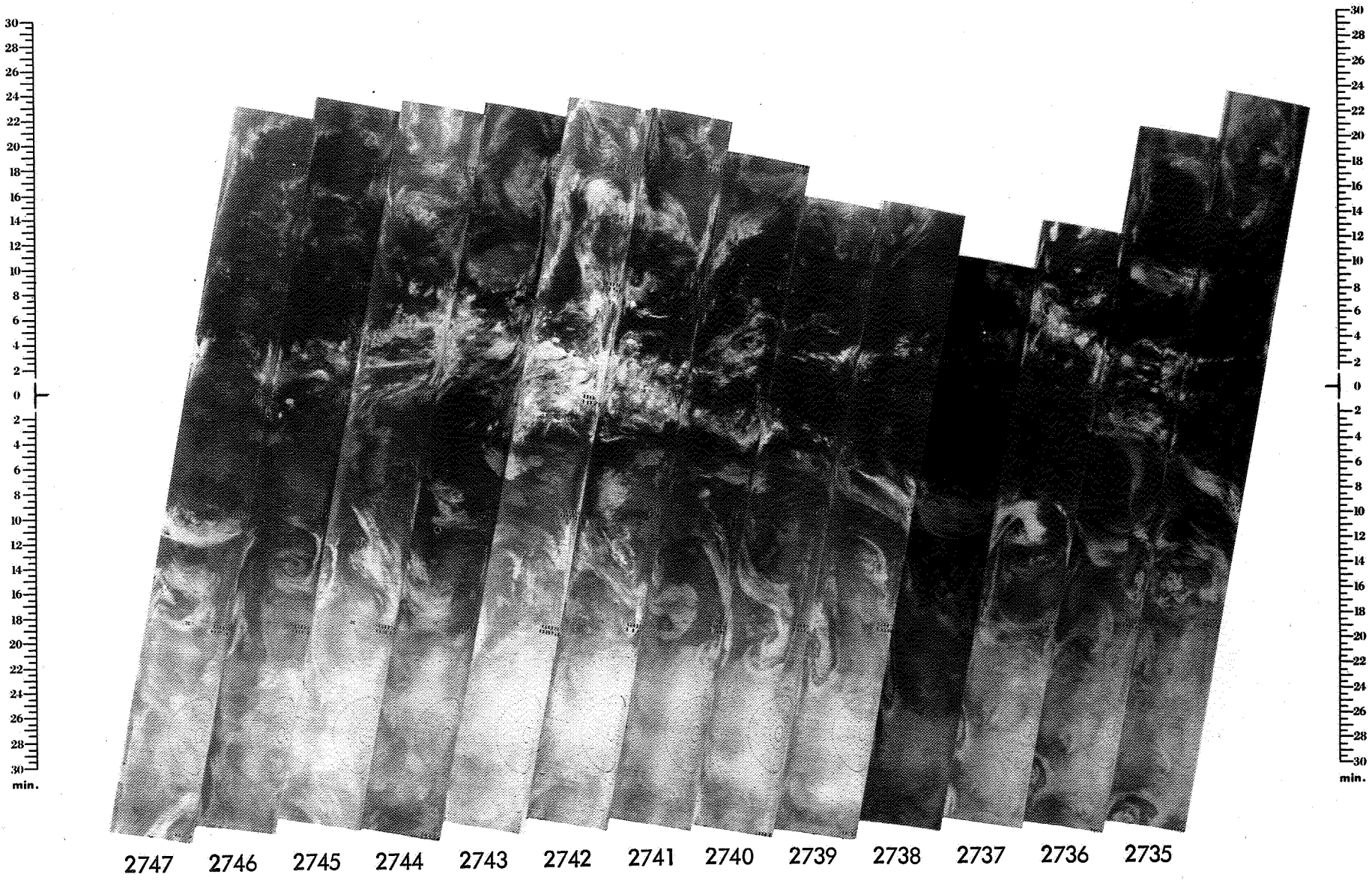
6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2734 2733 2732 2731 2730 2729 2728 2727 2726 2725 2724 2723 2722 2721
2 JULY 1973
11.5 μm



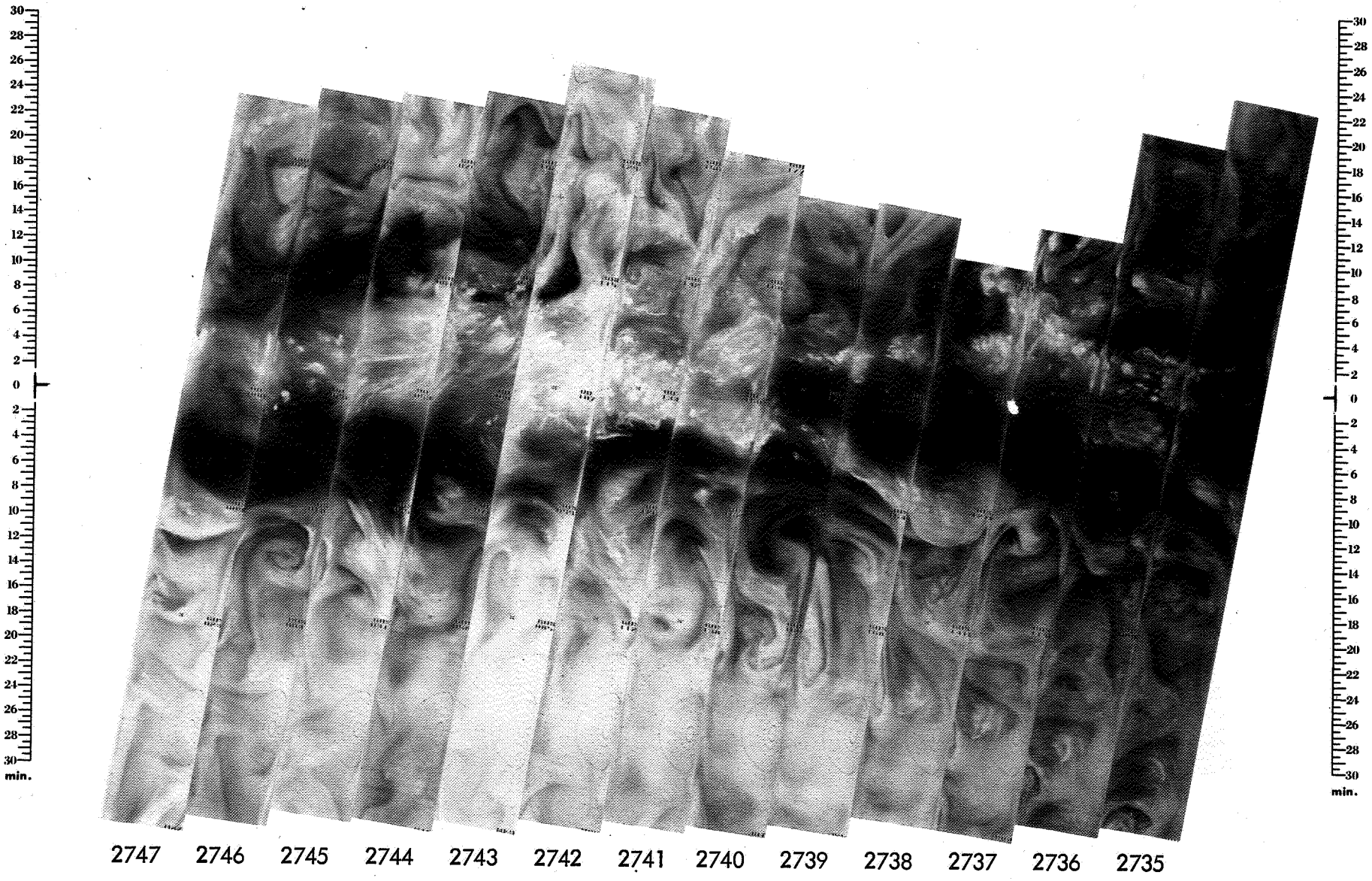
2 JULY 1973

6.7 μm



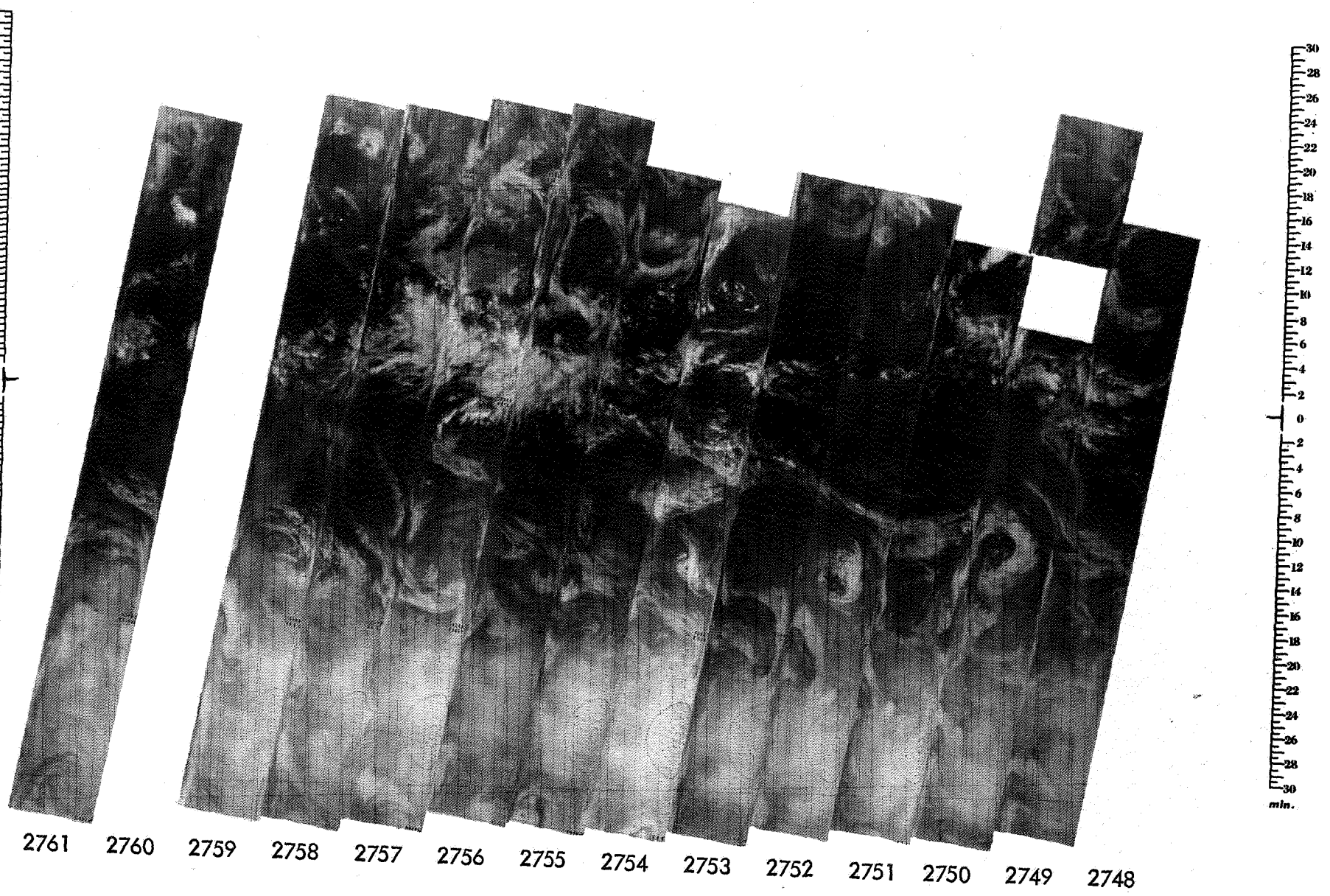
3 JULY 1973

11.5 μm



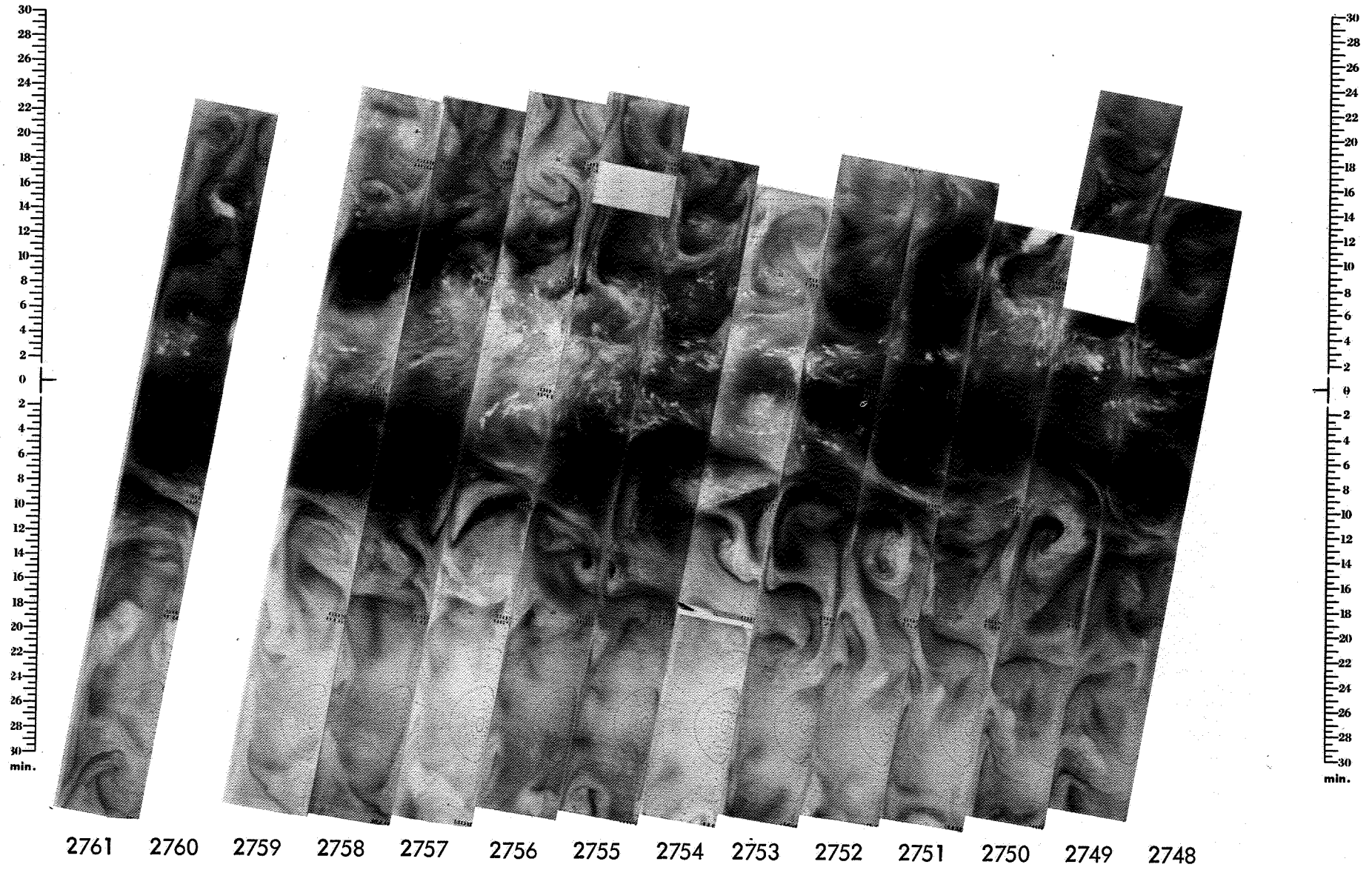
3 JULY 1973

6.7 μm



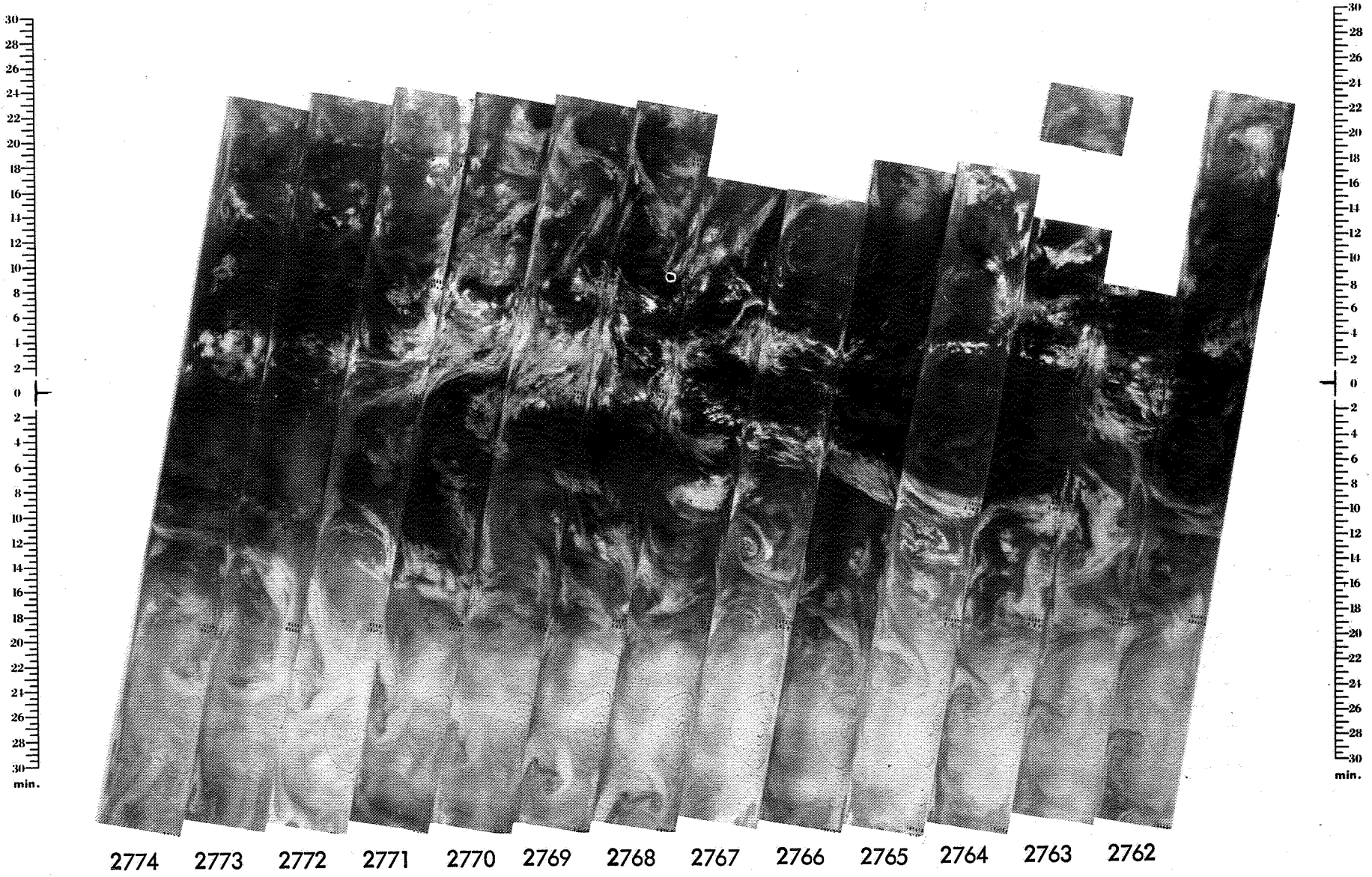
4 JULY 1973

11.5 μm



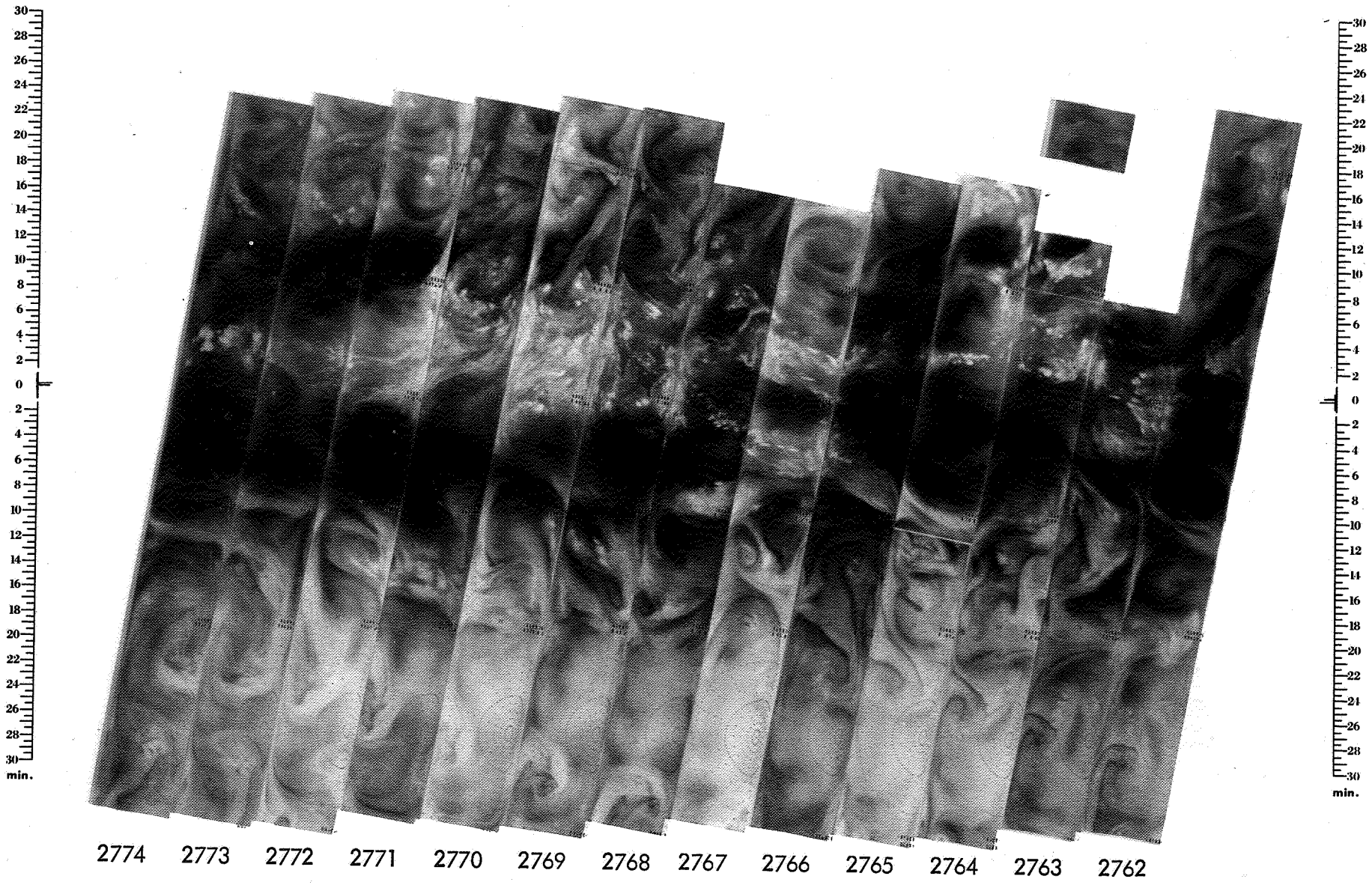
4 JULY 1973

6.7 μm



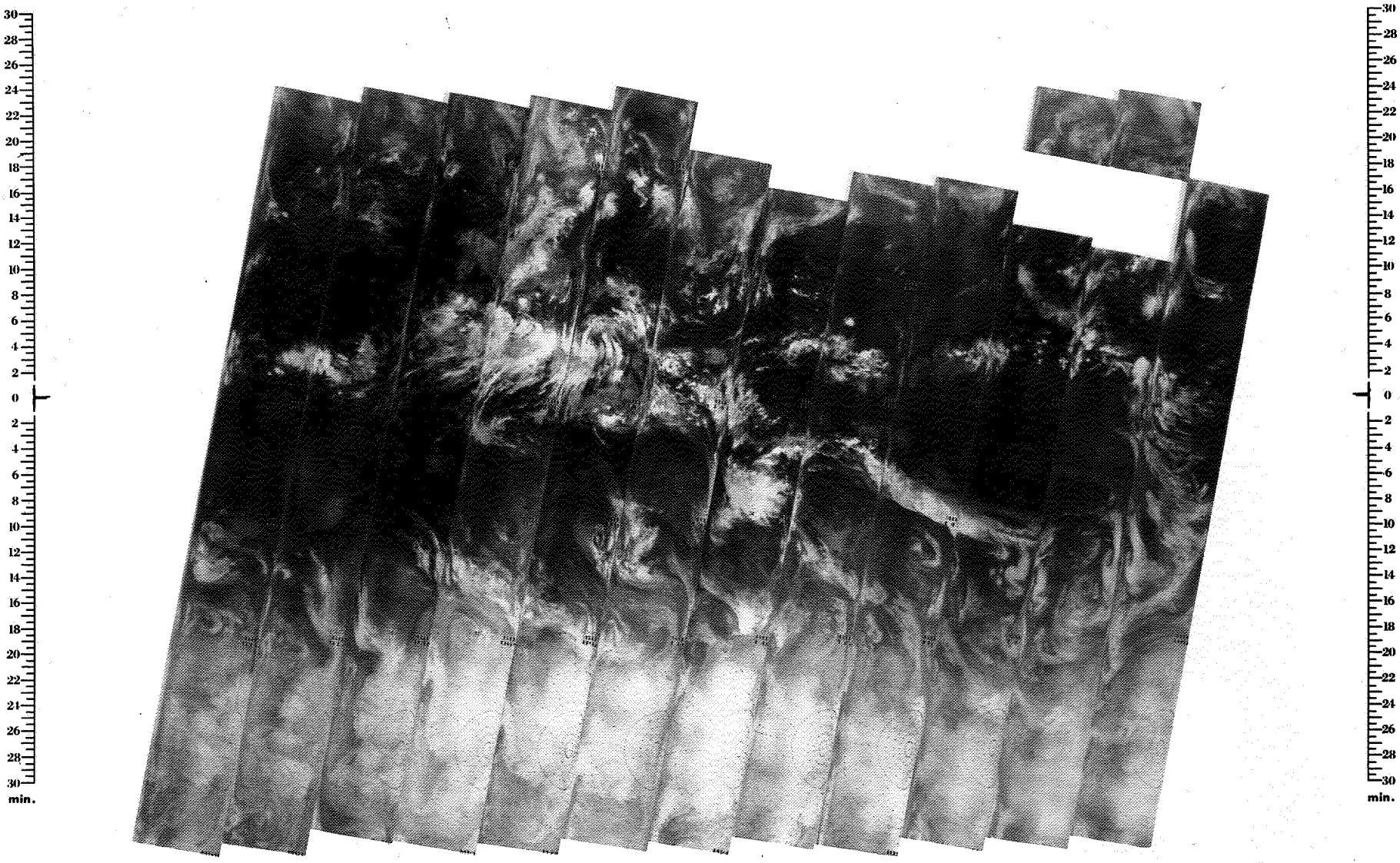
5 JULY 1973

11.5 μm



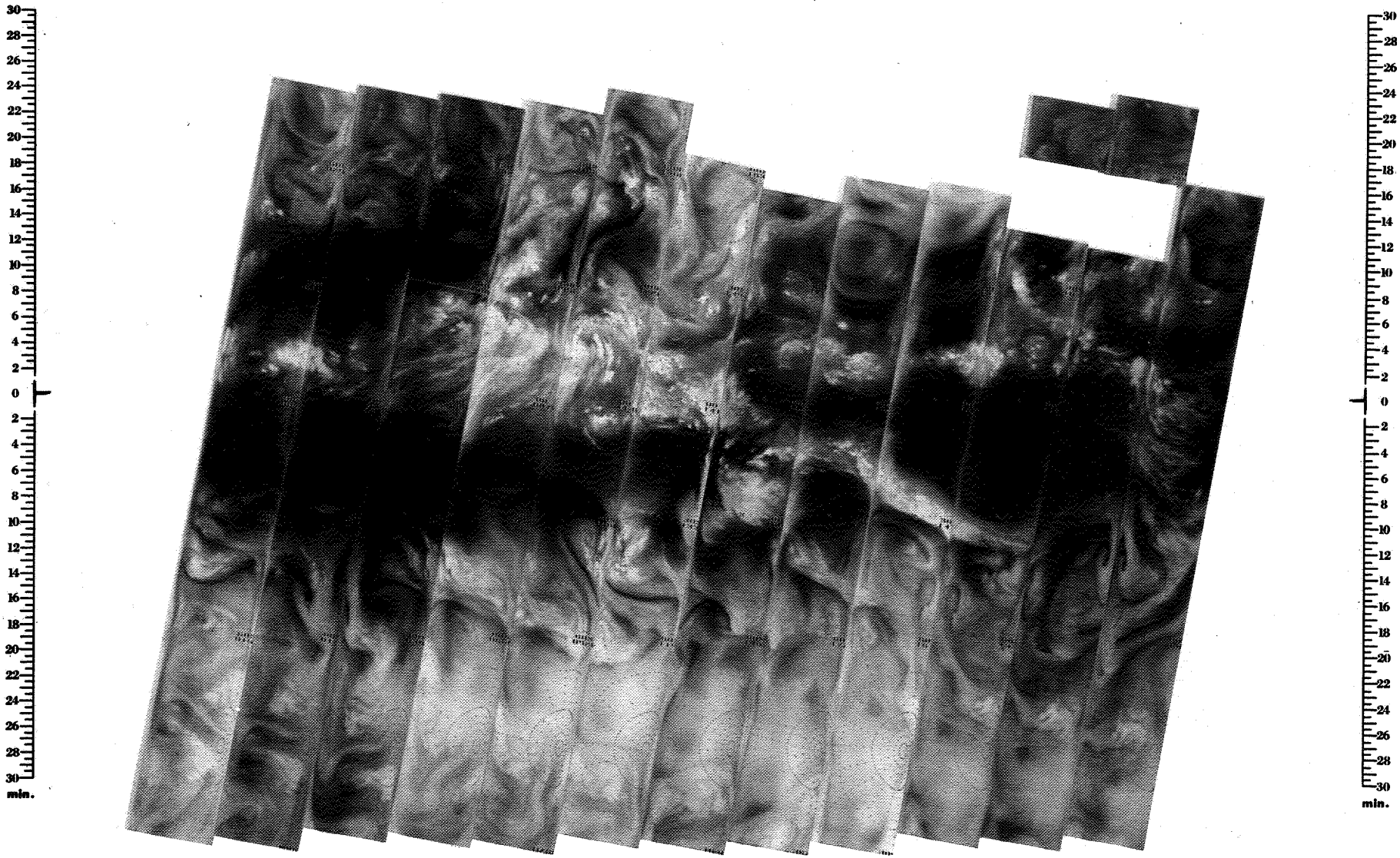
5 JULY 1973

6.7 μm



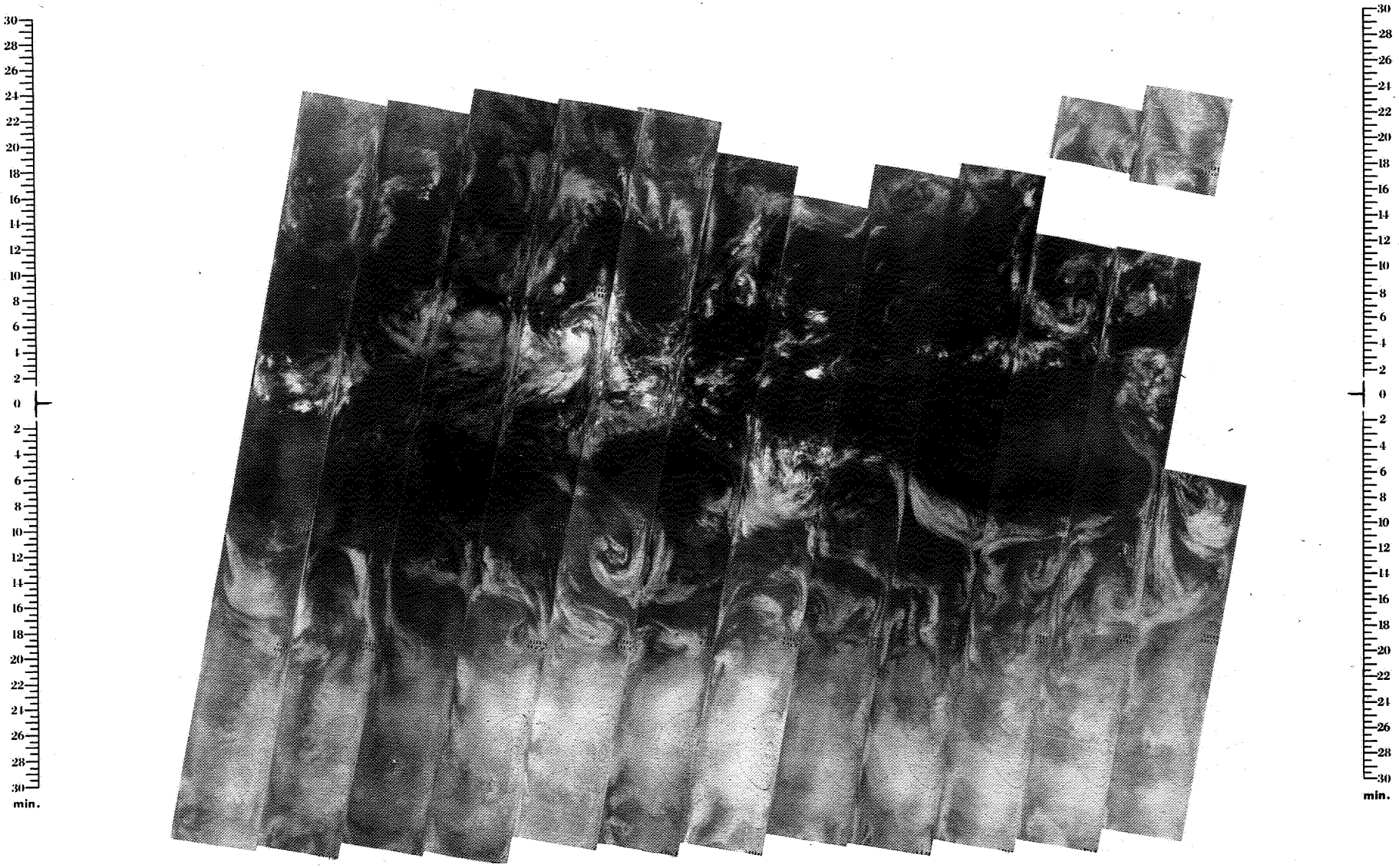
6 JULY 1973

11.5 μm



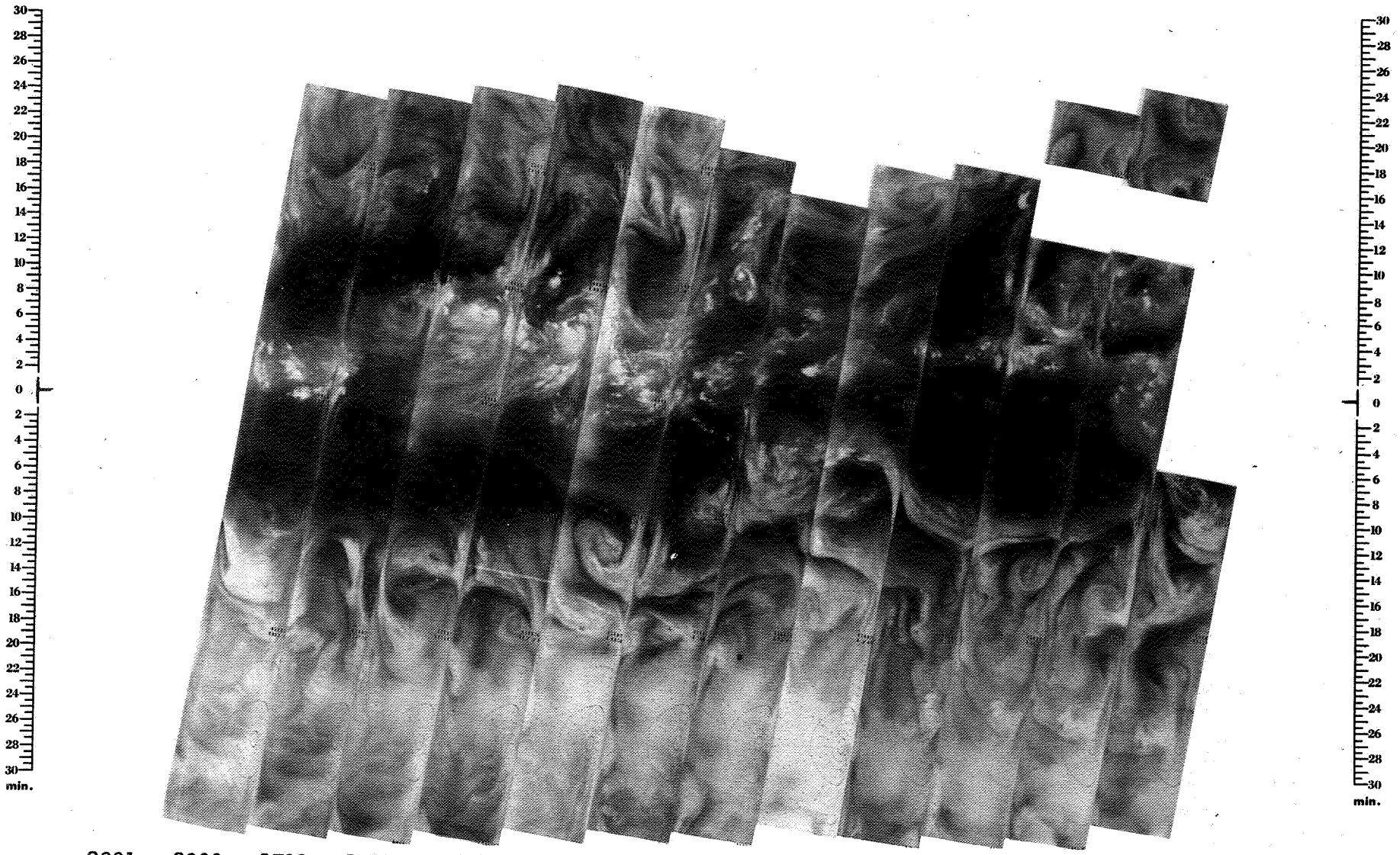
6 JULY 1973

6.7 μm



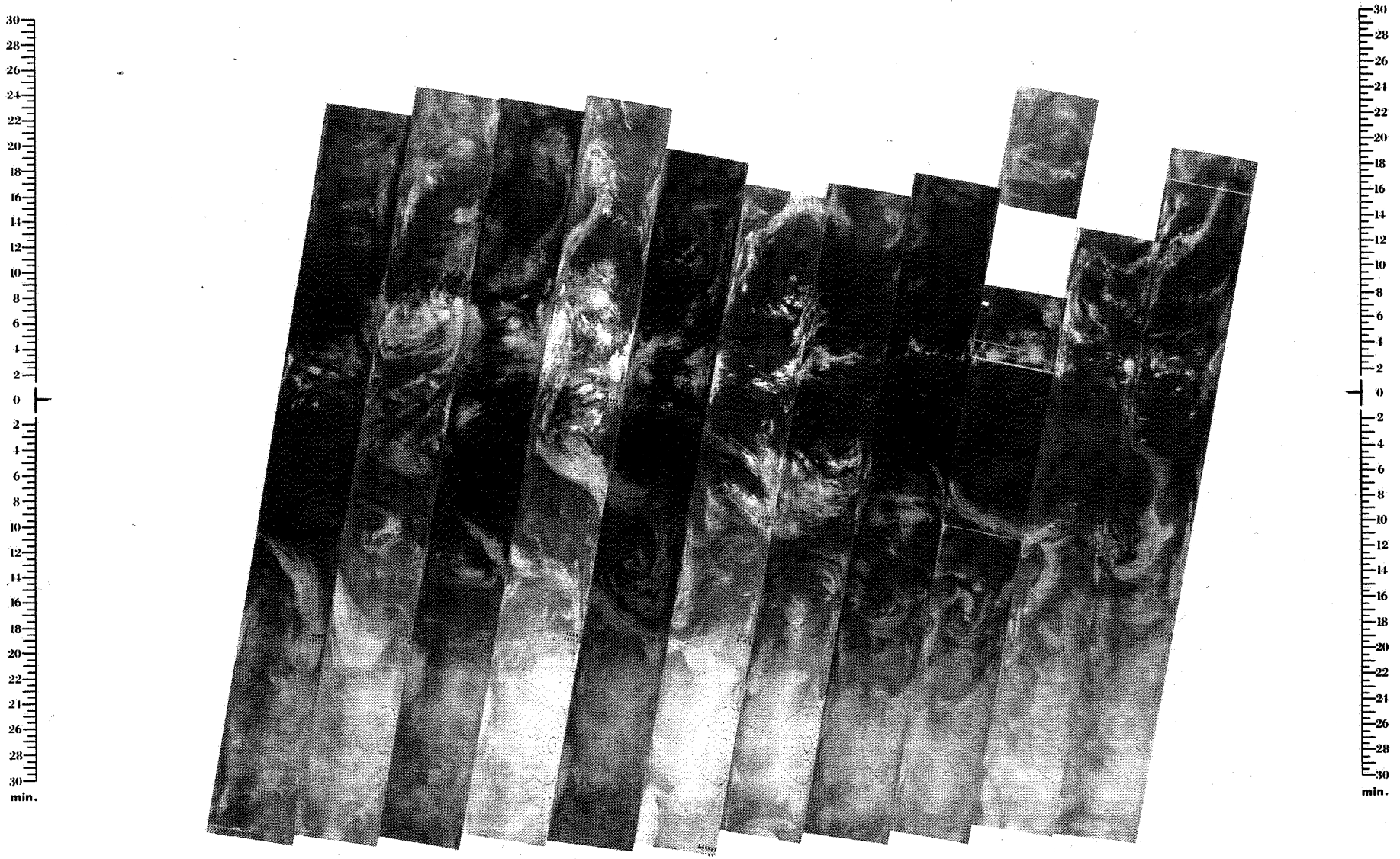
7 JULY 1973

11.5 μm



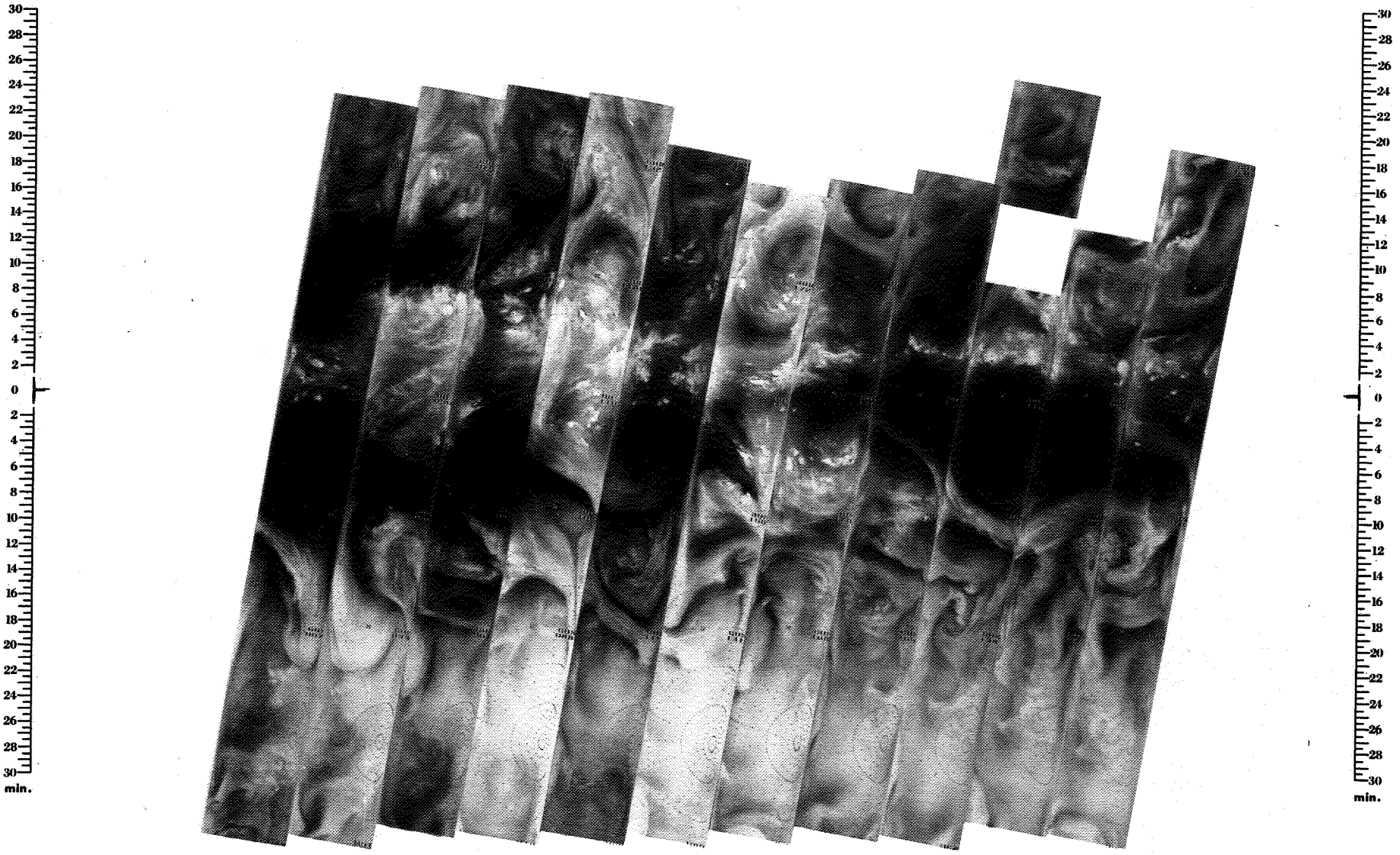
7 JULY 1973

6.7 μm



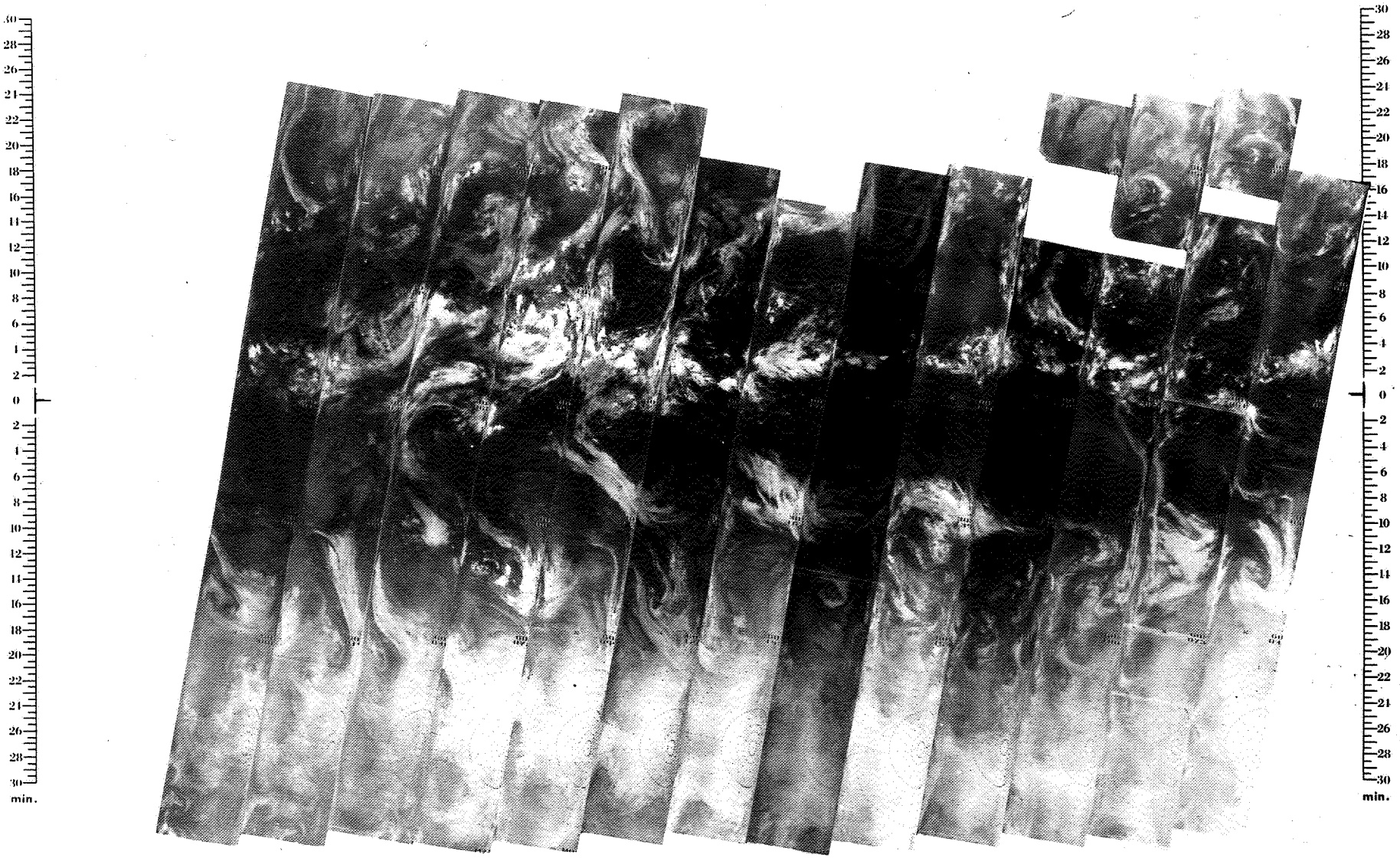
8 JULY 1973

11.5 μm



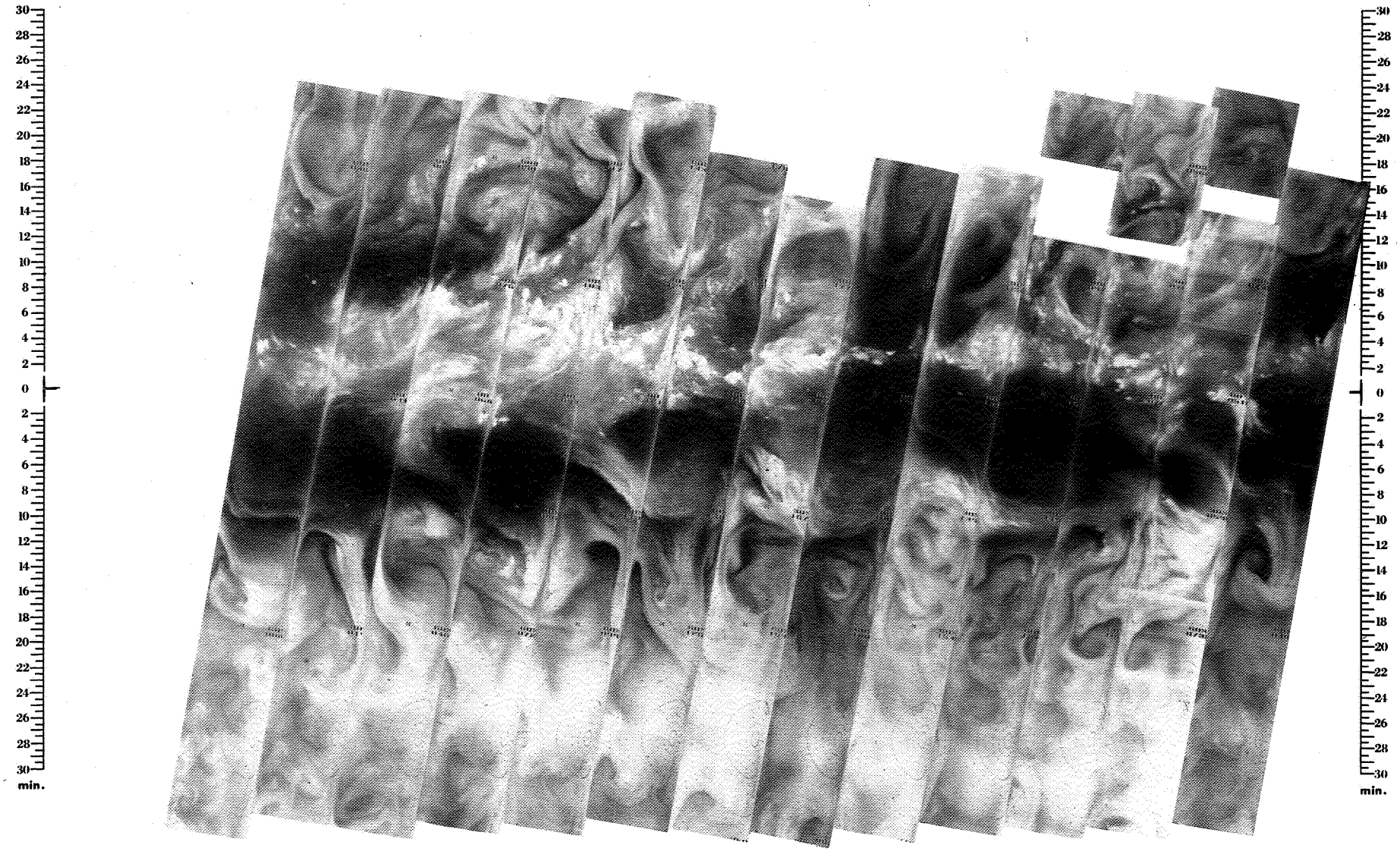
8 JULY 1973

6.7 μm



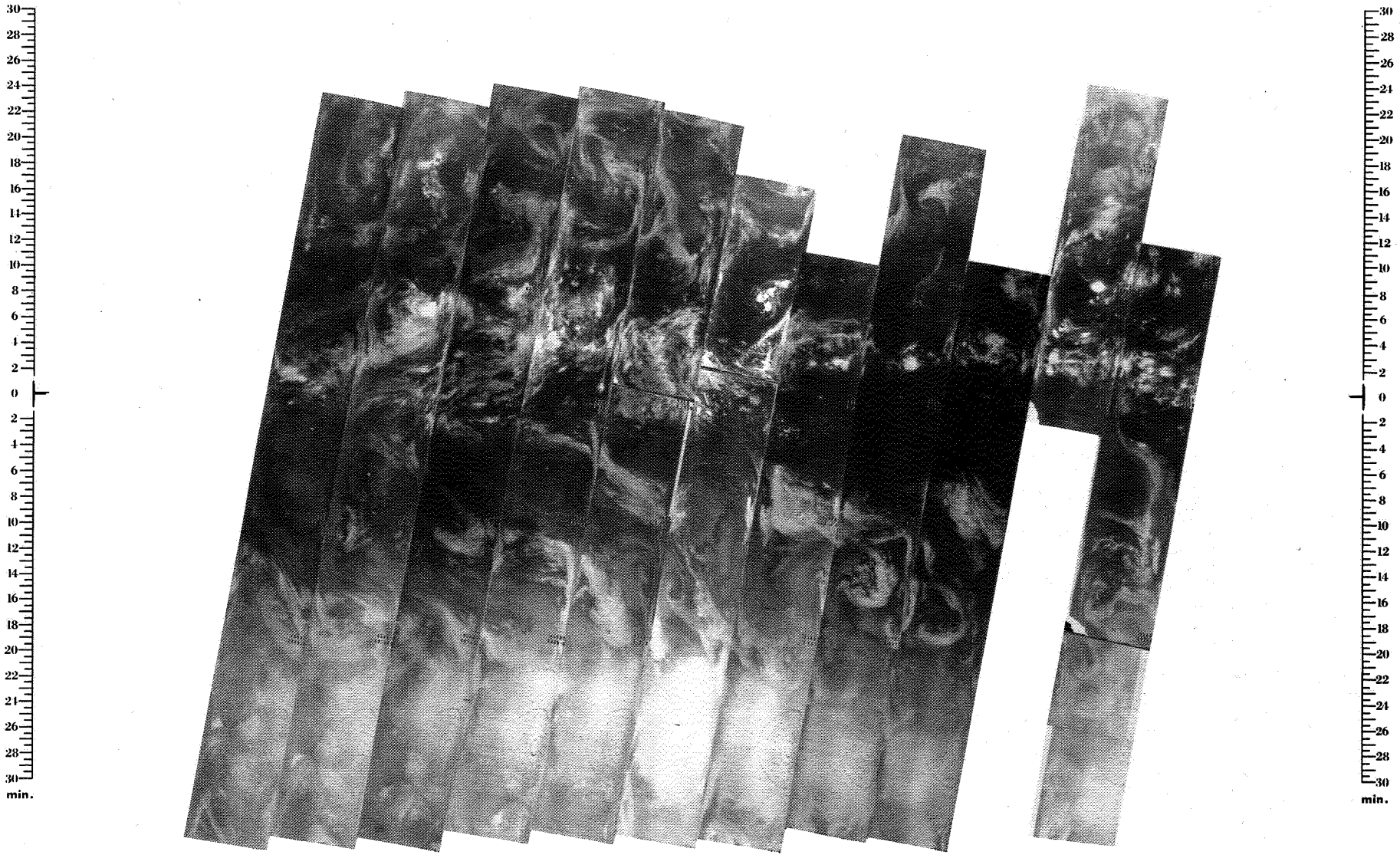
9 JULY 1973

11.5 μm



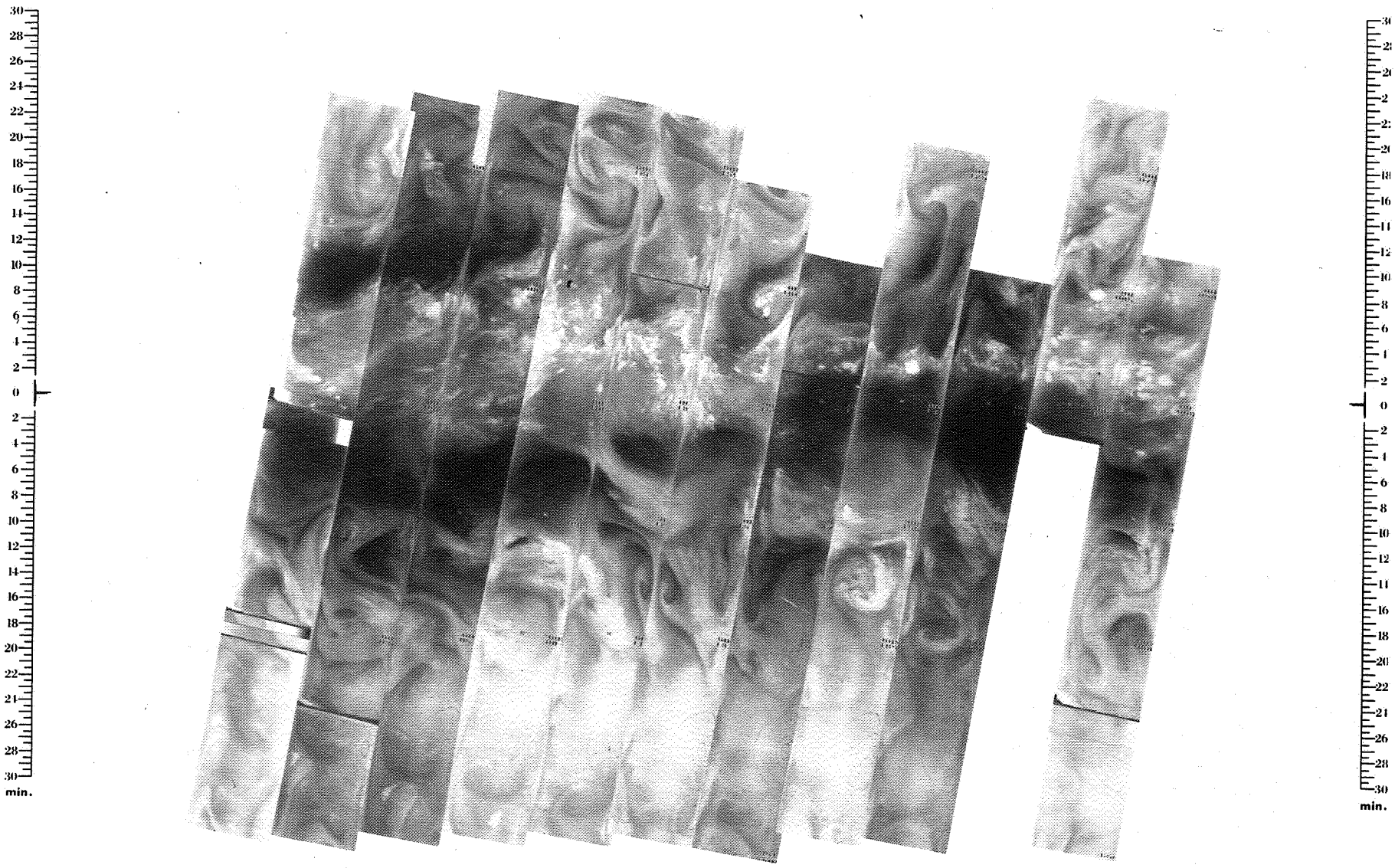
9 JULY 1973

6.7 μm



10 JULY 1973

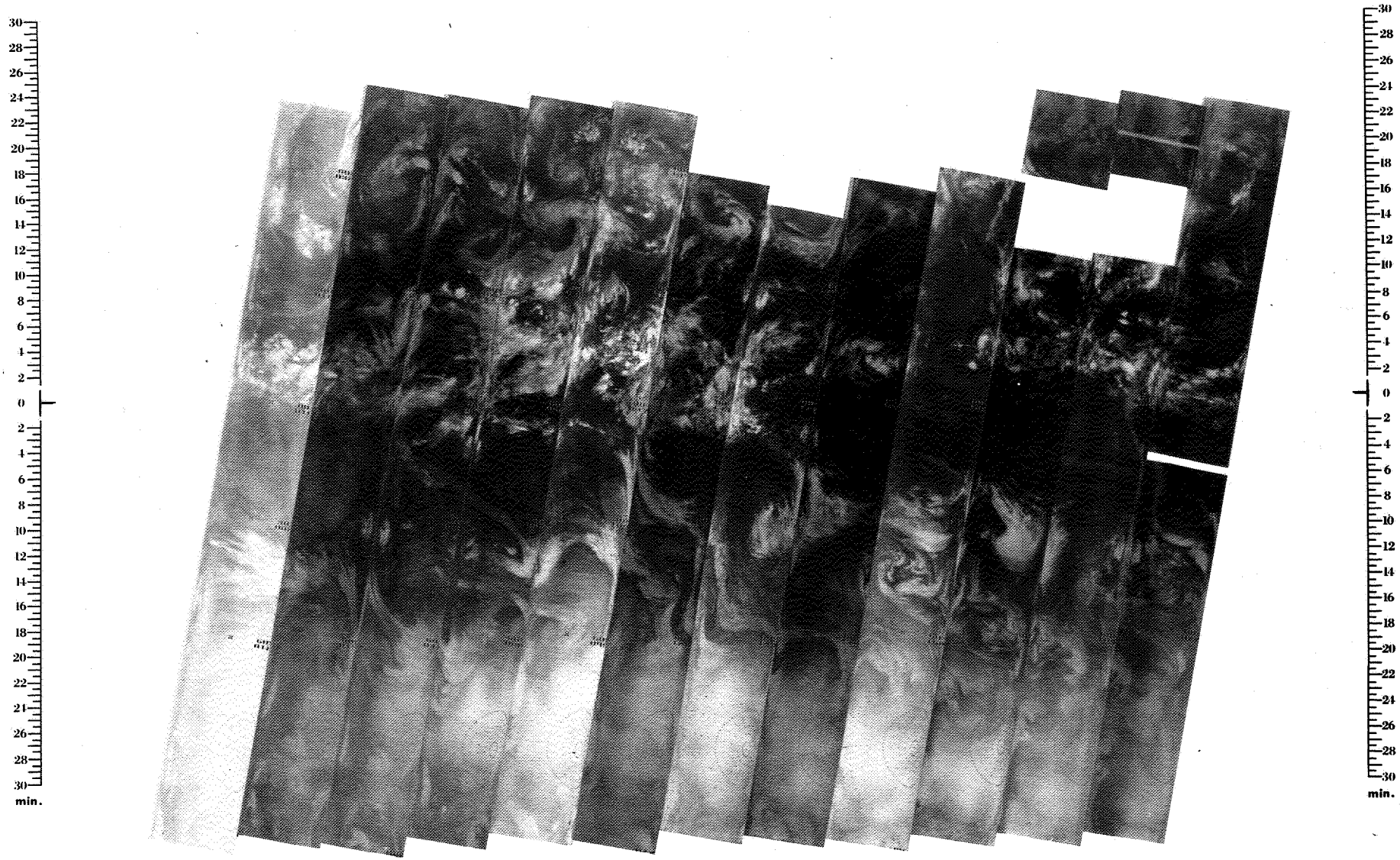
11.5 μm



2841 2840 2839 2838 2837 2836 2835 2834 2833 2832 2831 2830 2829

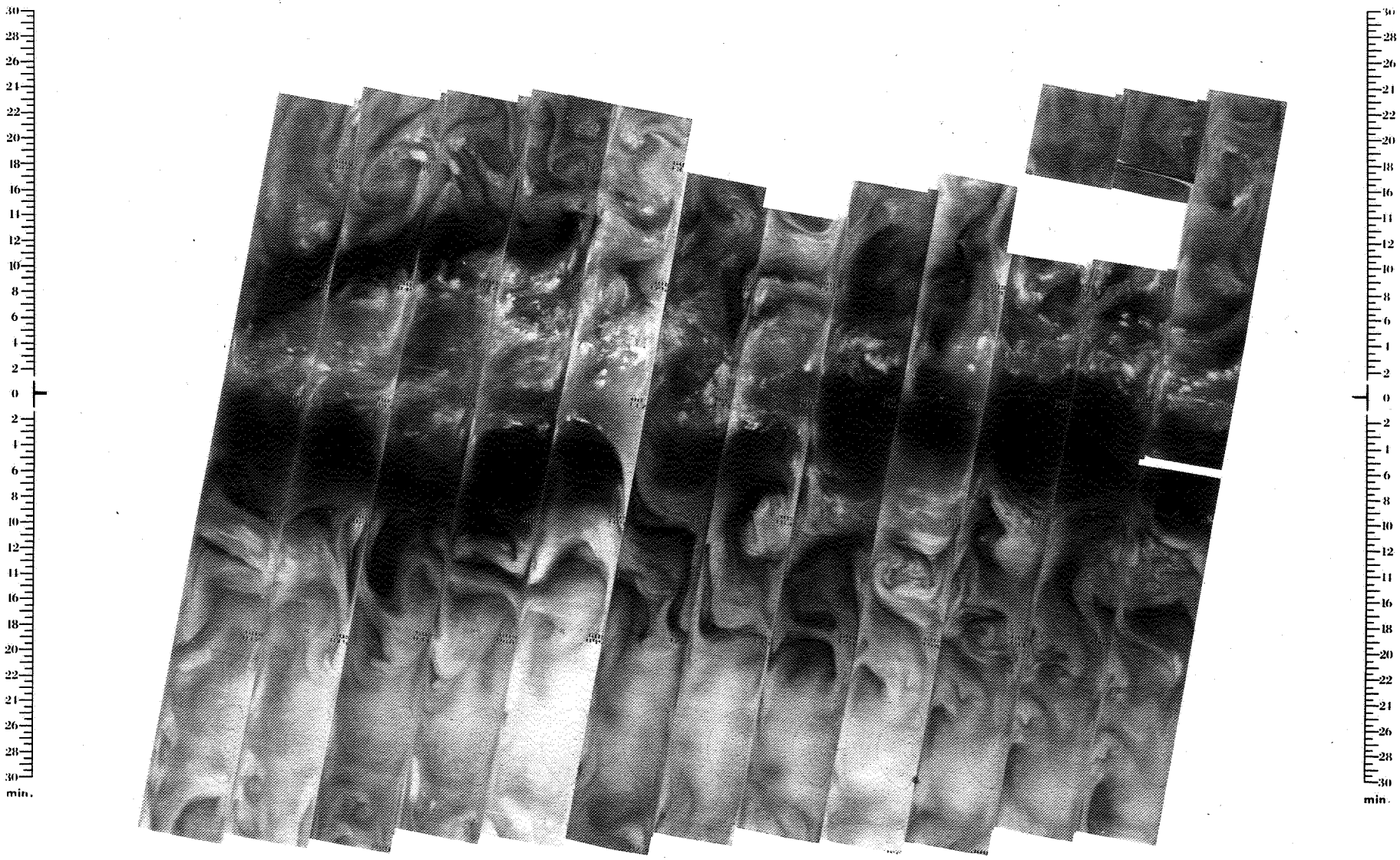
10 JULY 1973

6.7 μm



11 JULY 1973

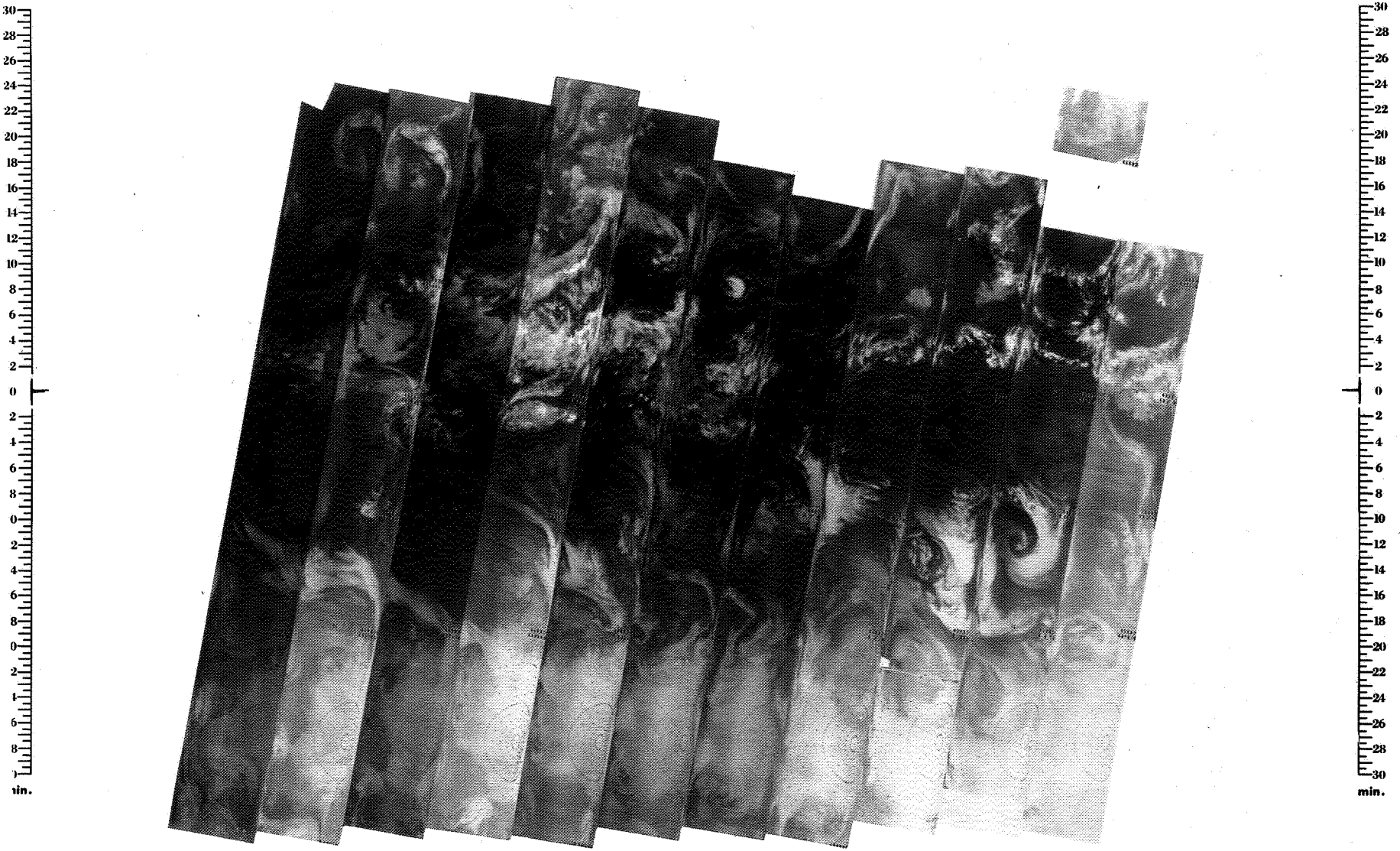
11.5 μm

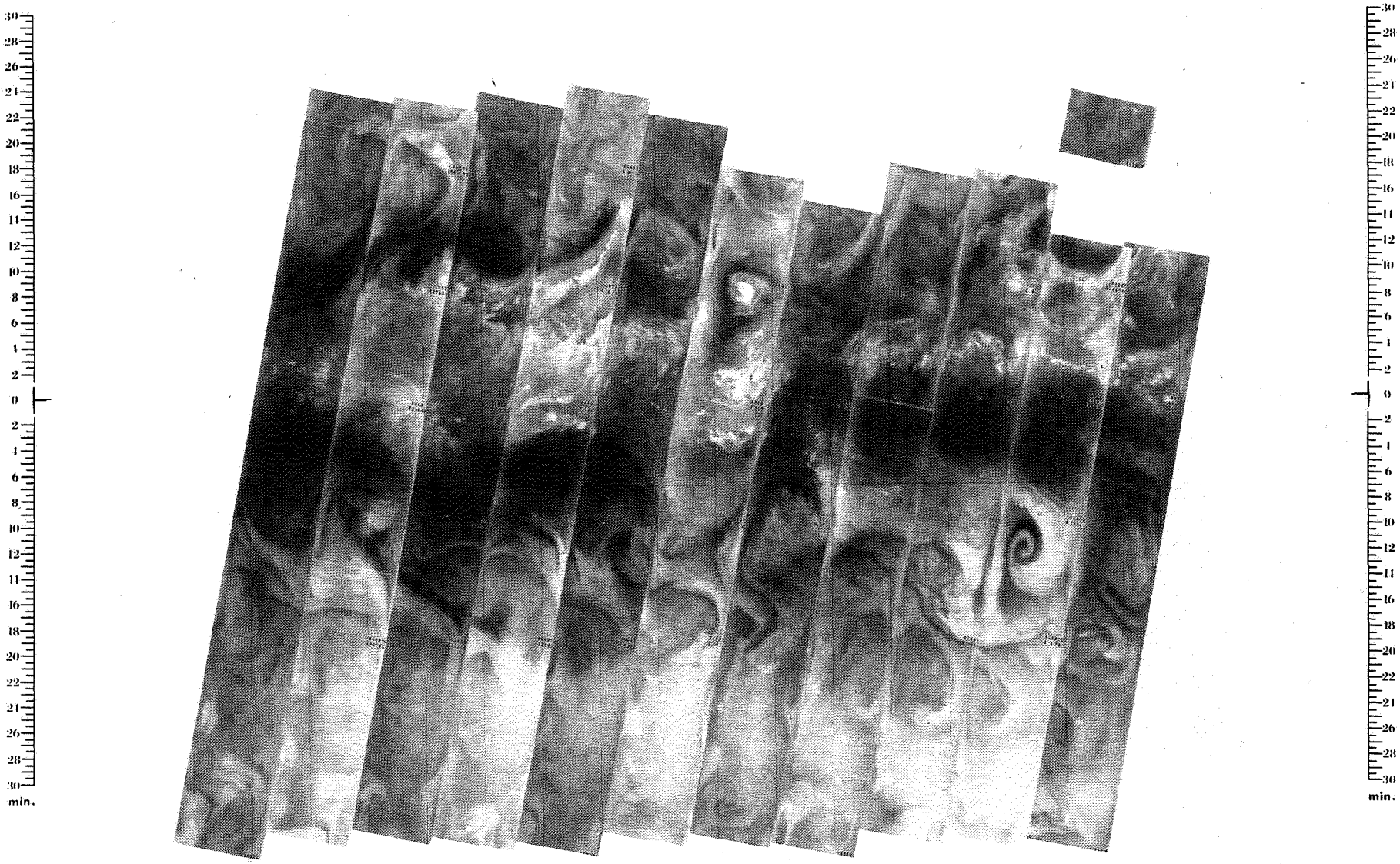


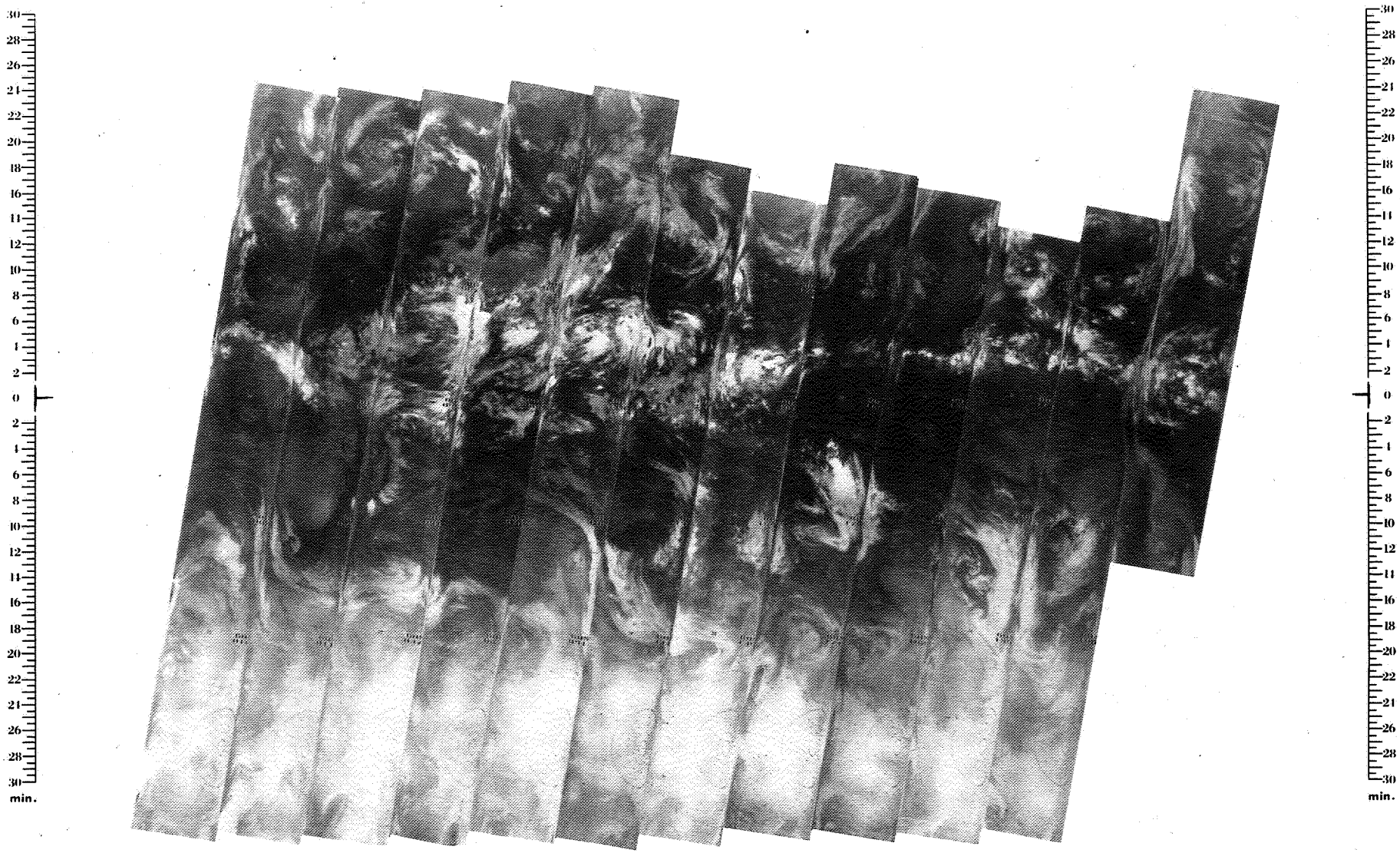
2855 2854 2853 2852 2851 2850 2849 2848 2847 2846 2845 2844 2843 2842

11 JULY 1973

6.7 μm

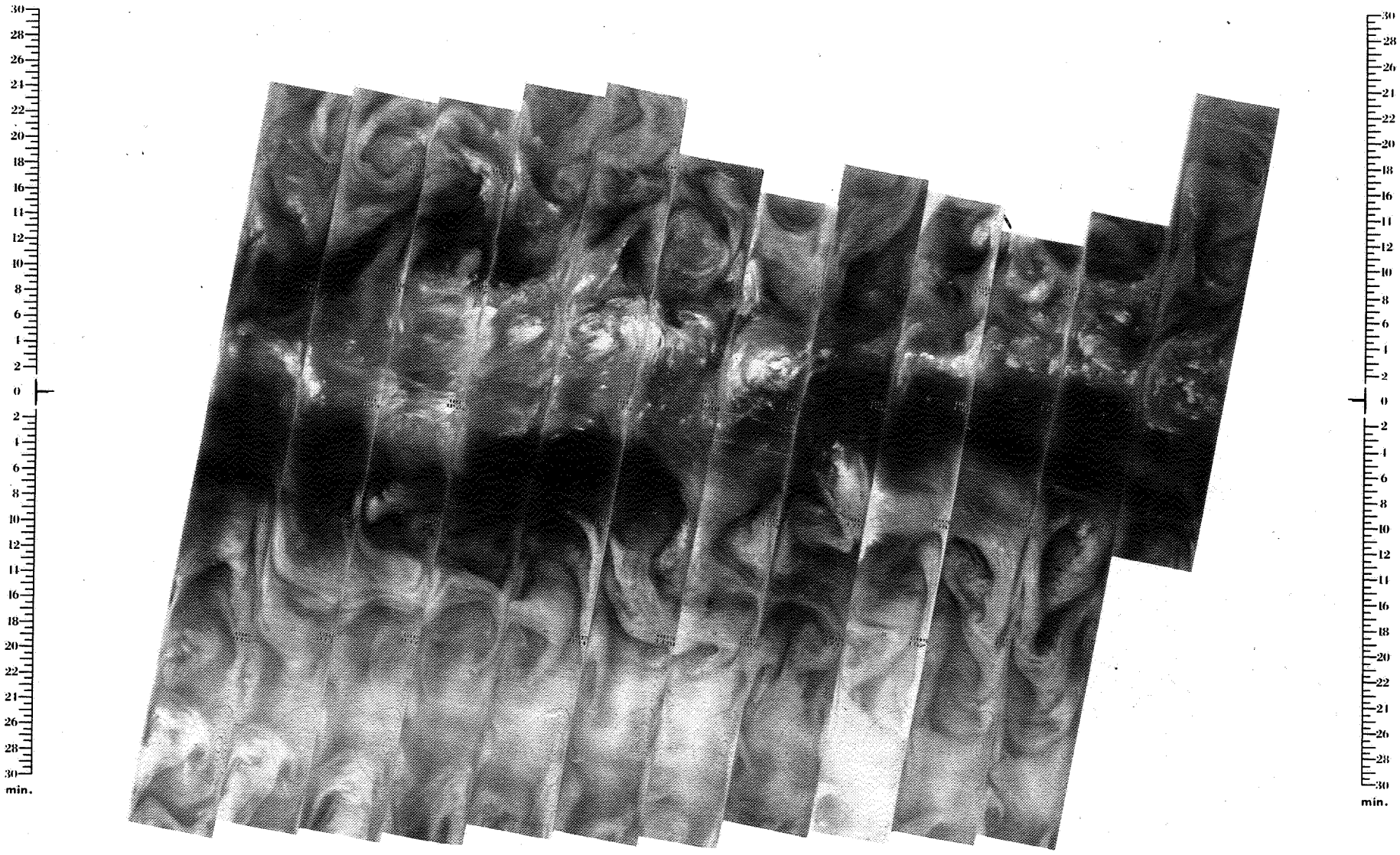

2868 2867 2866 2865 2864 2863 2862 2861 2860 2859 2858 2857 2856
12 JULY 1973
11.5 μm
min.

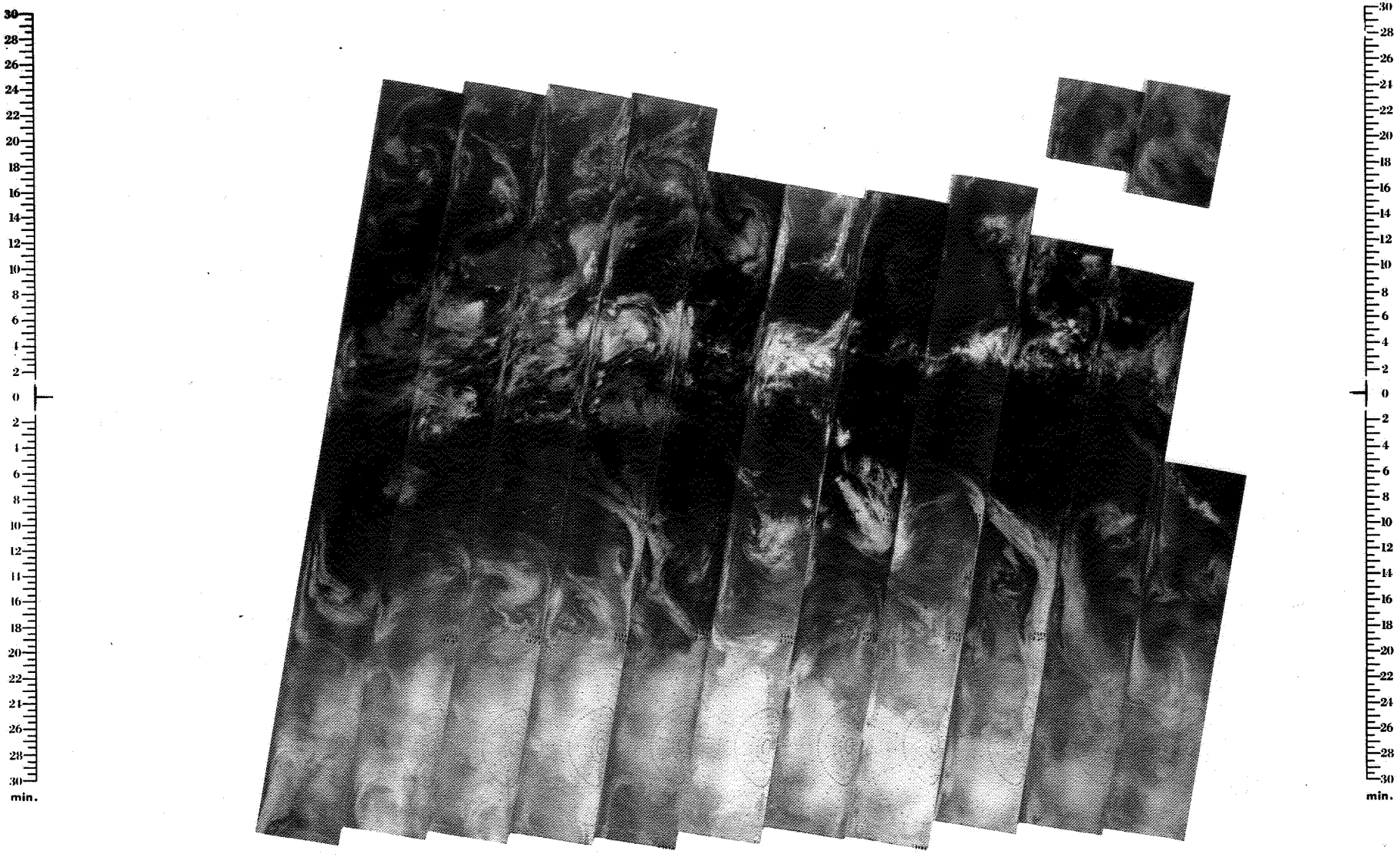

min.
min.
2868 2867 2866 2865 2864 2863 2862 2861 2860 2859 2858 2857 2856
12 JULY 1973
6.7 μm

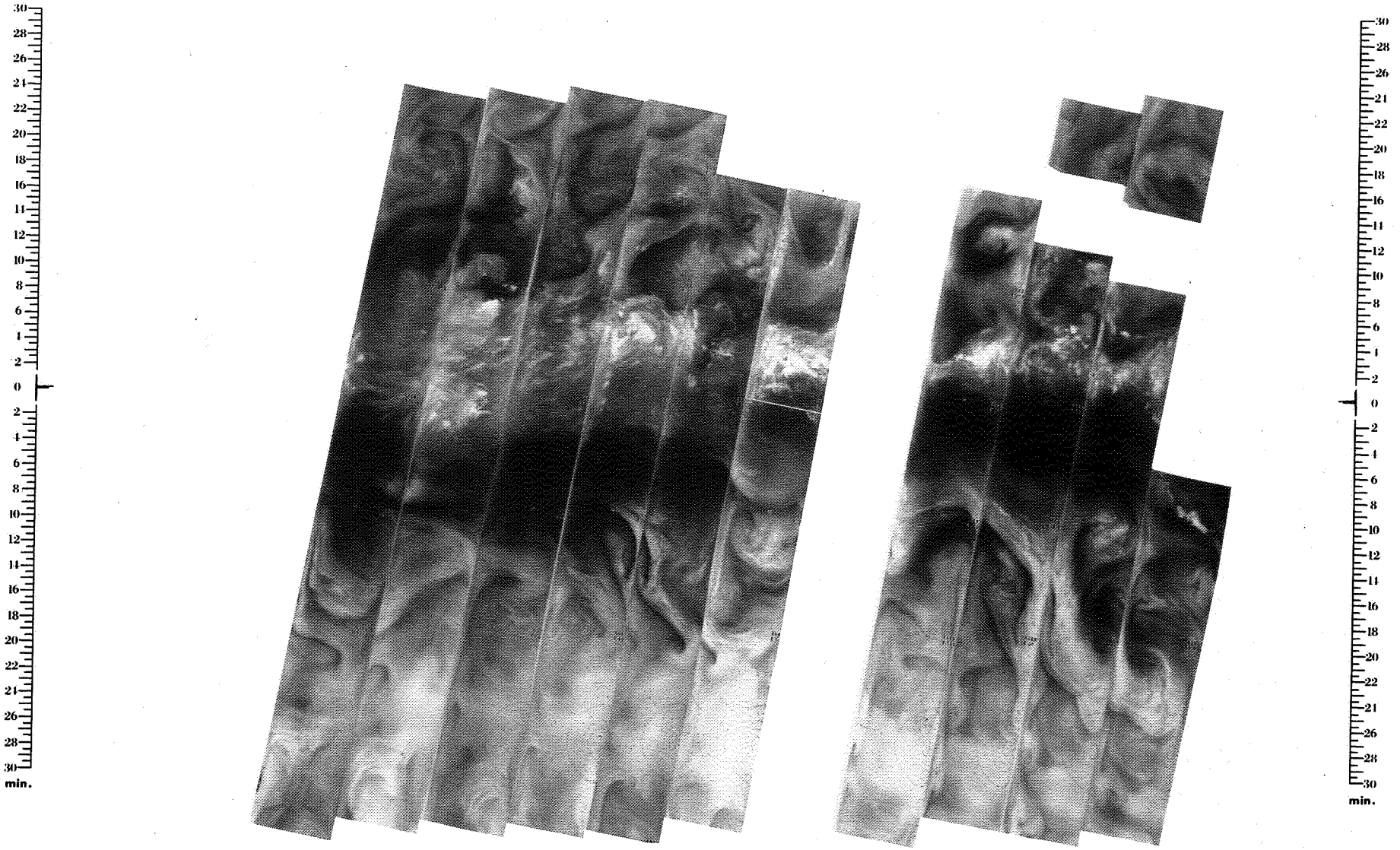


13 JULY 1973

11.5 μm

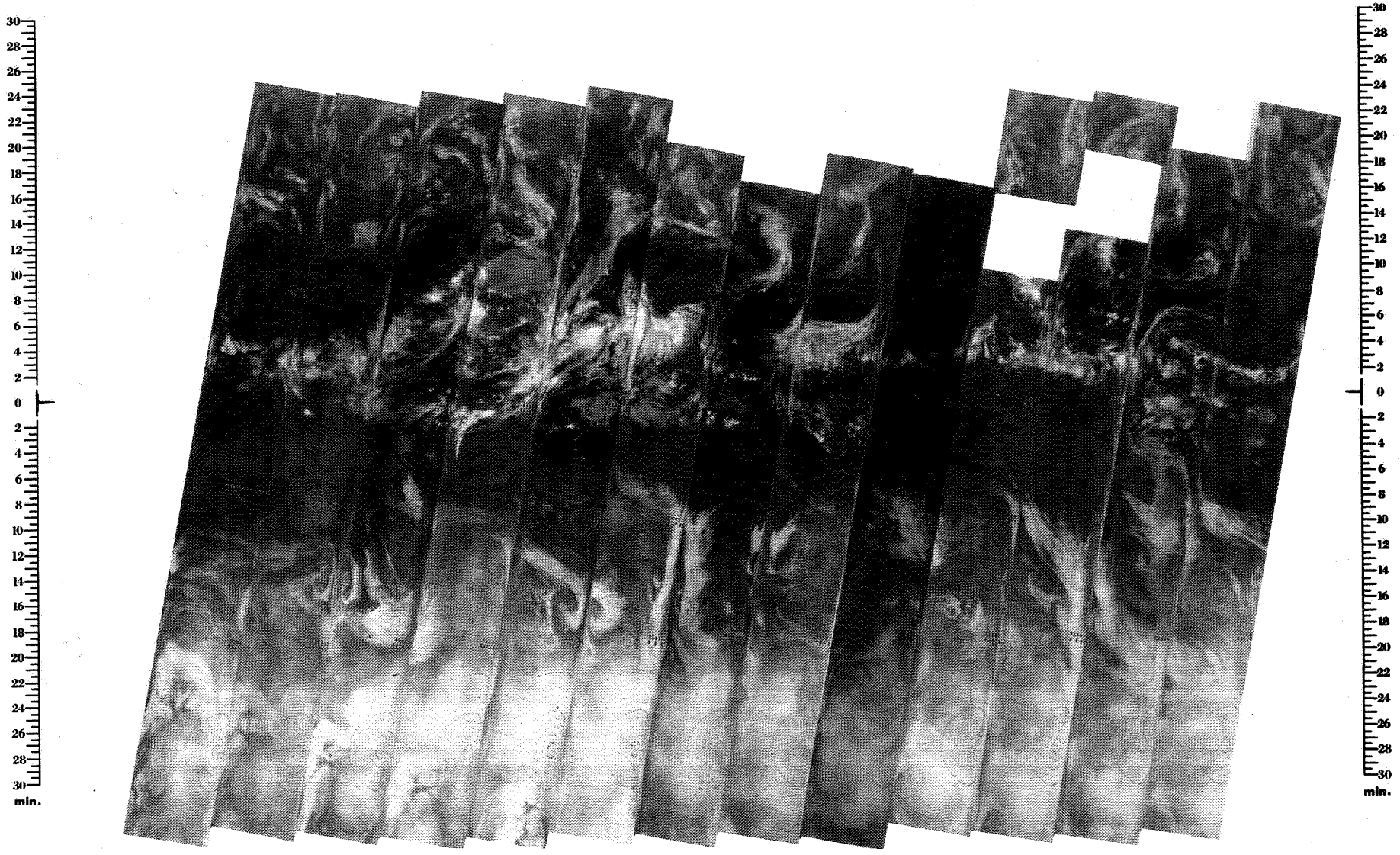

min.
min.
2881
2880
2879
2878
2877
2876
2875
2874
2873
2872
2871
2870
2869
13 JULY 1973
6.7 μm

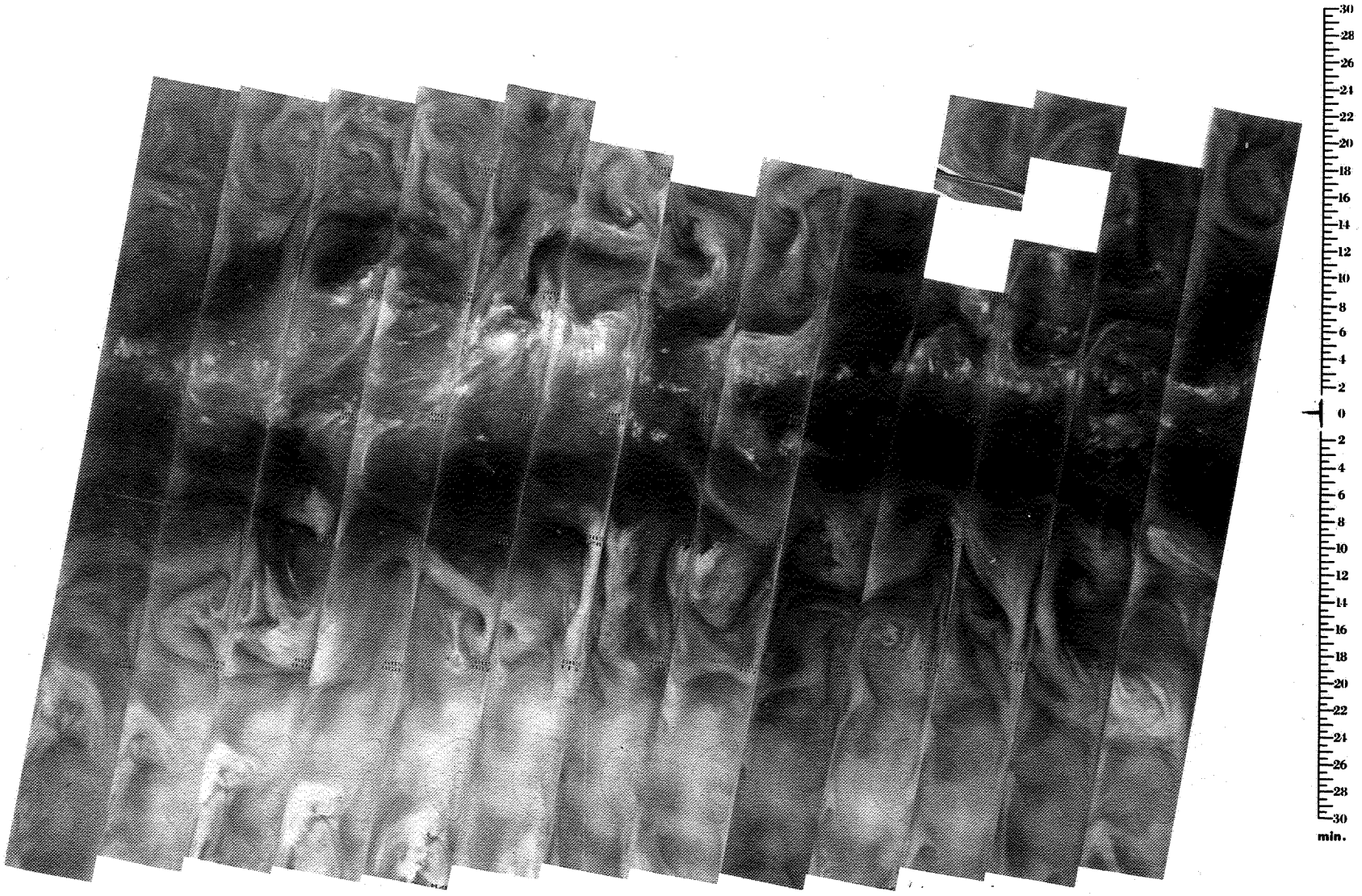

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2895 2894 2893 2892 2891 2890 2889 2888 2887 2886 2885 2884 2883 2882
14 JULY 1973
11.5 μm



14 JULY 1973

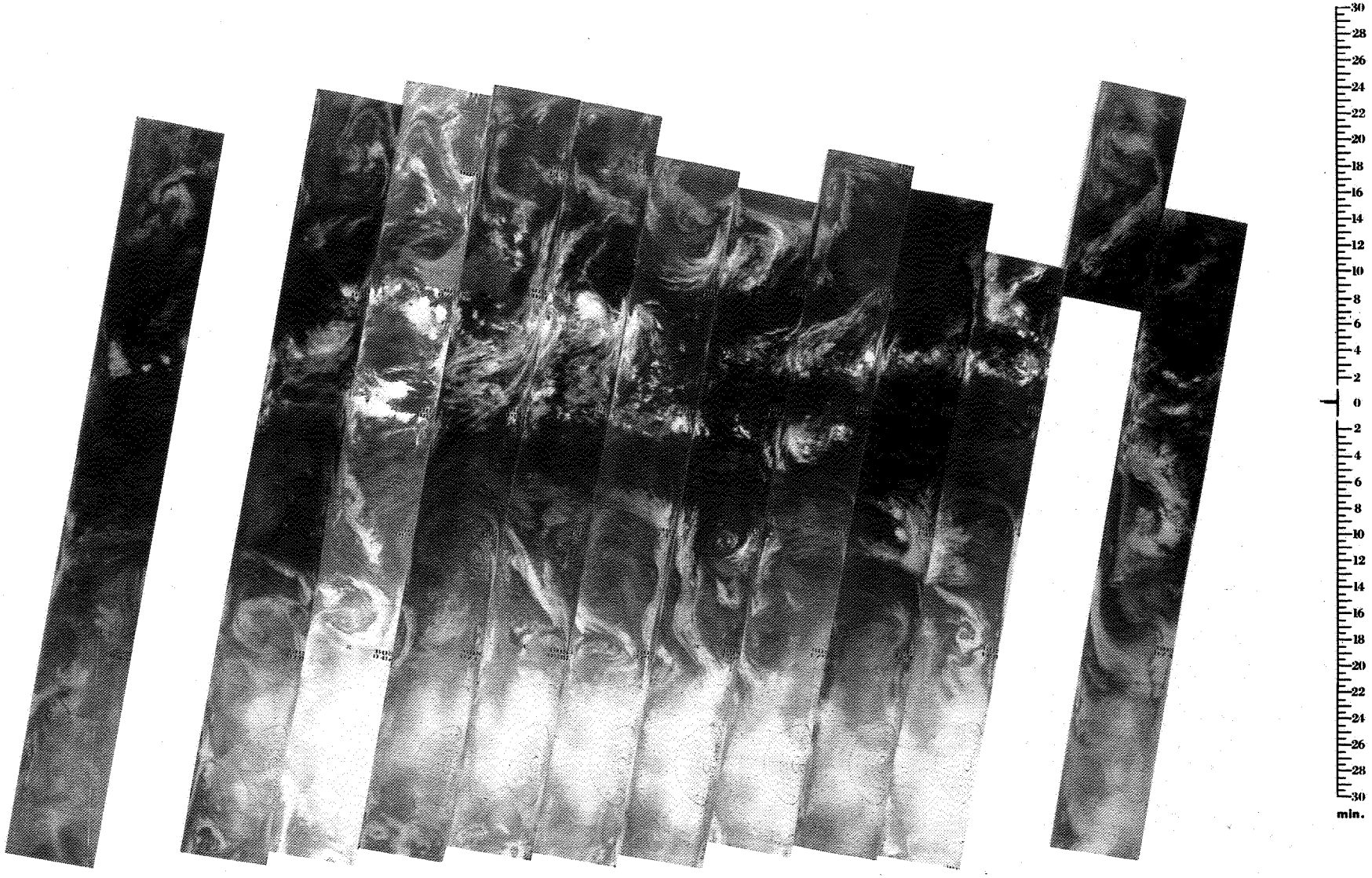
6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2908 2907 2906 2905 2904 2903 2902 2901 2900 2899 2898 2897 2896
15 JULY 1973
11.5 μm



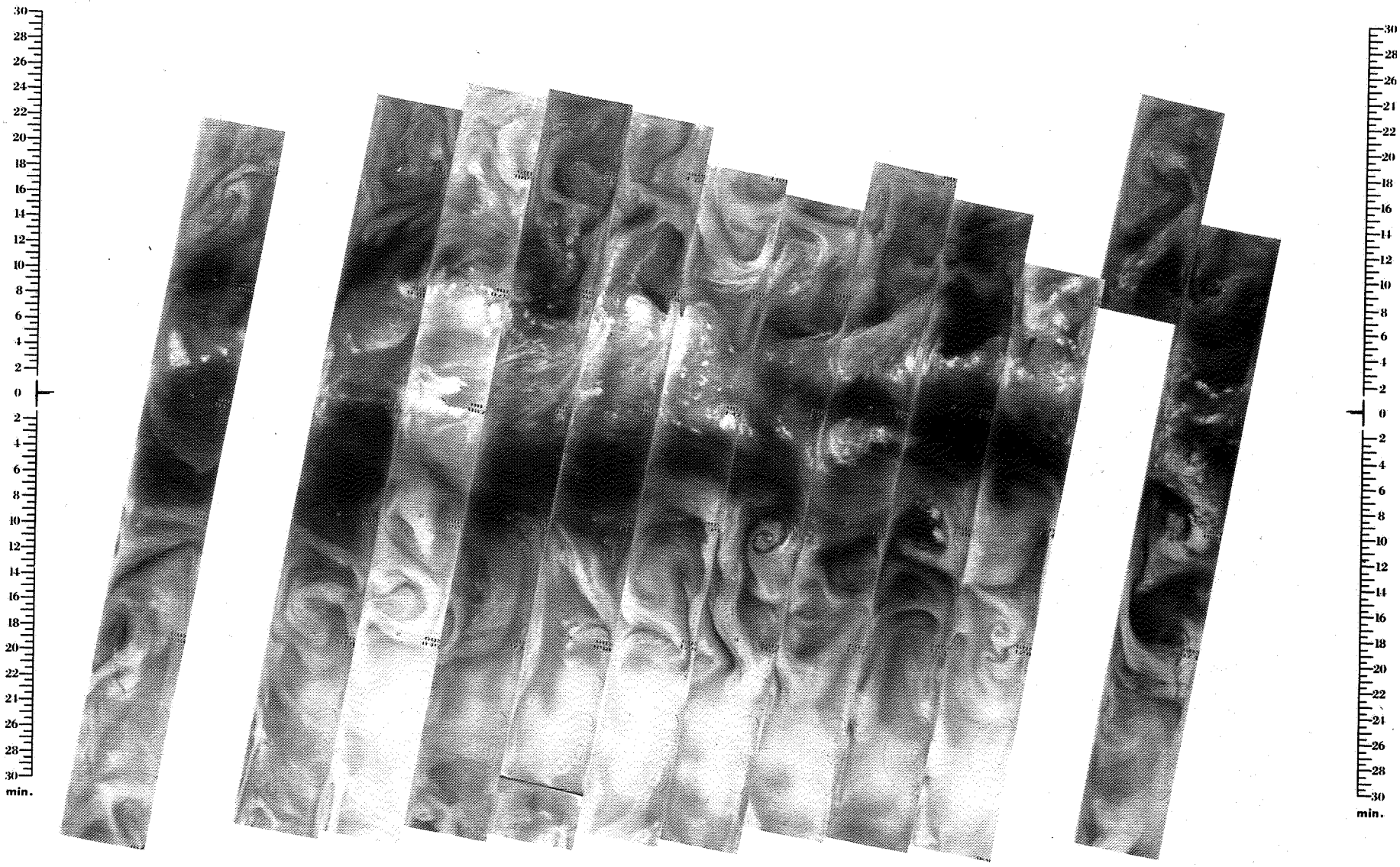
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6.7 μm



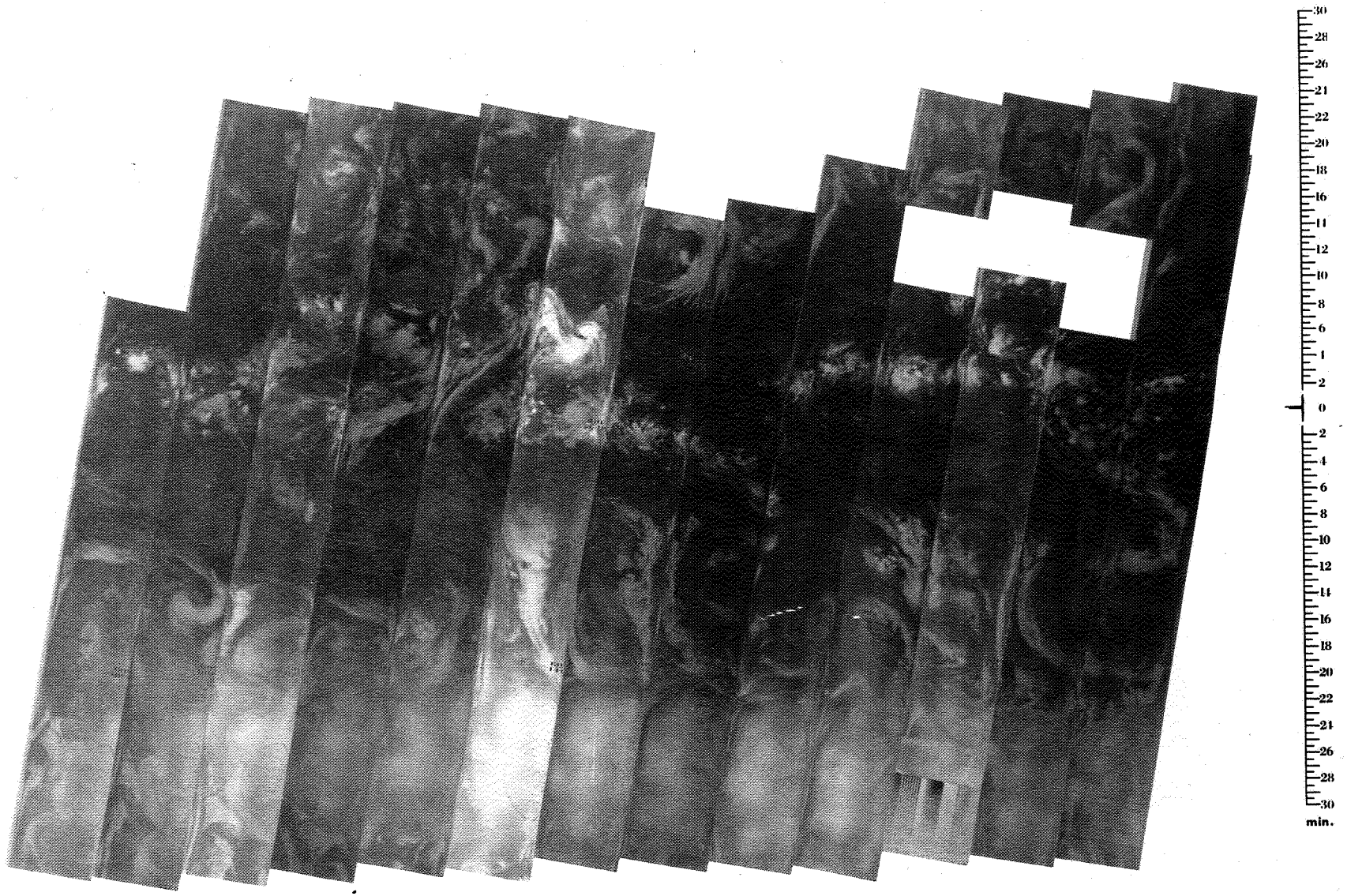
16 JULY 1973

11.5 μm



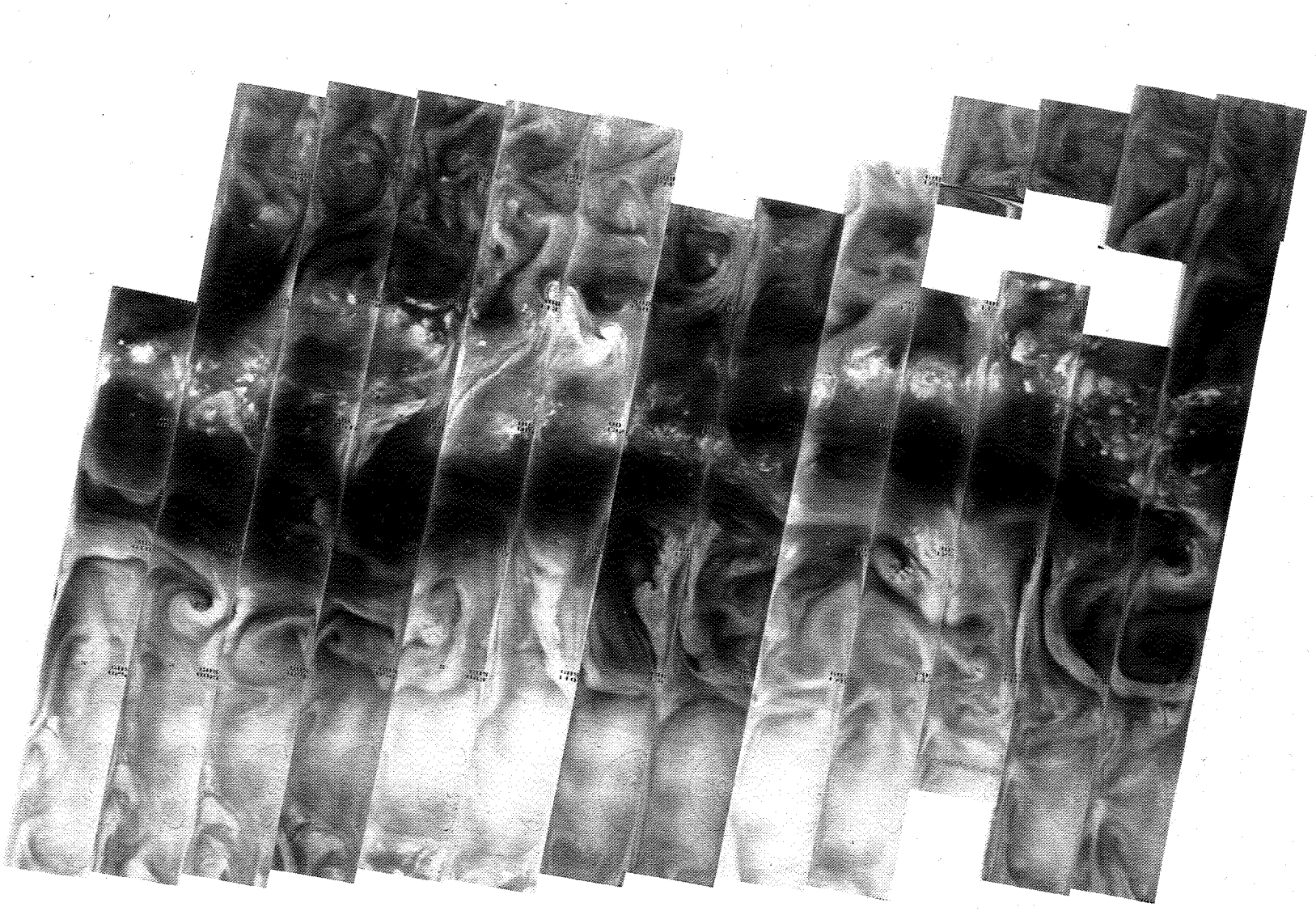
16 JULY 1973

6.7 μm



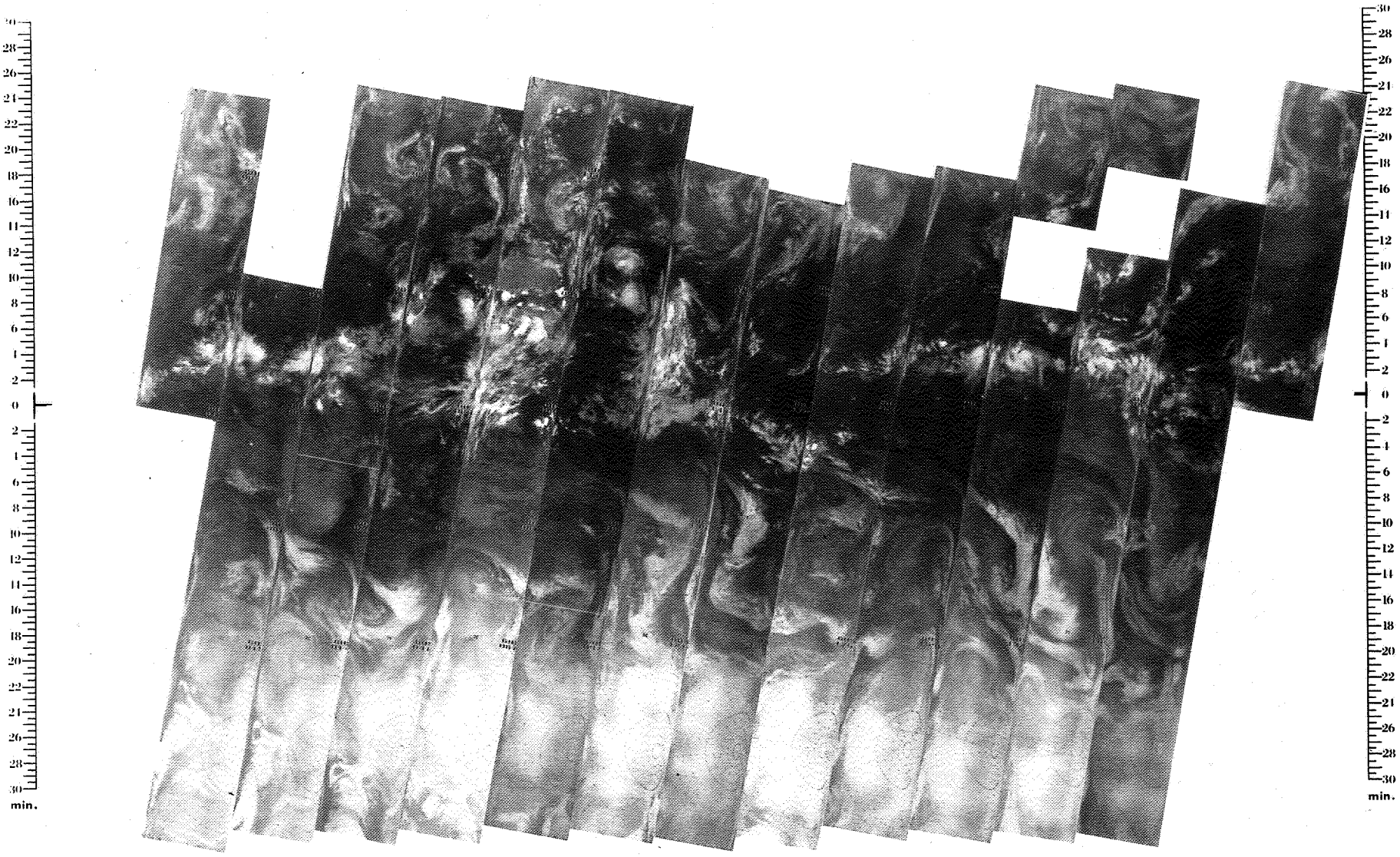
17 JULY 1973

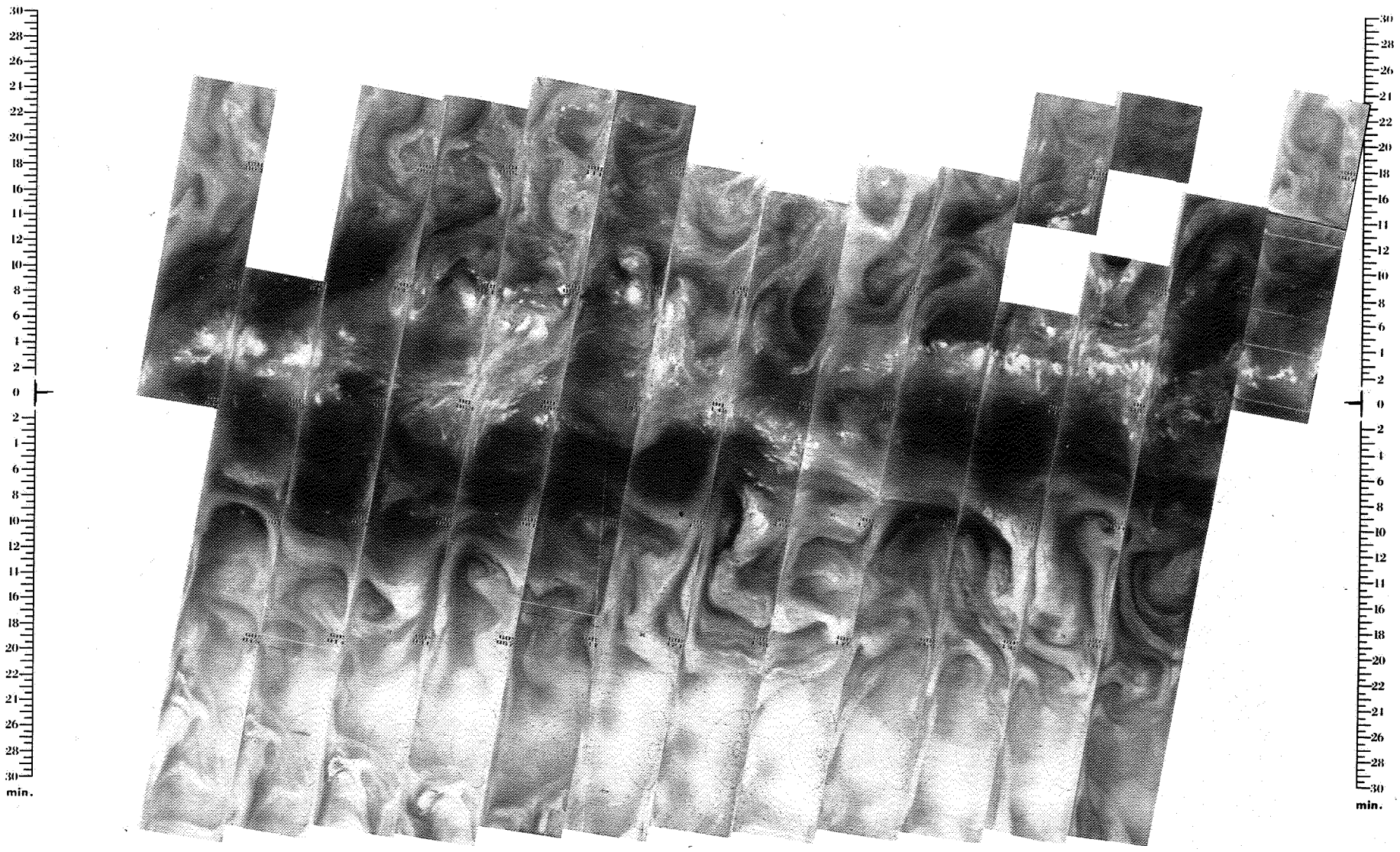
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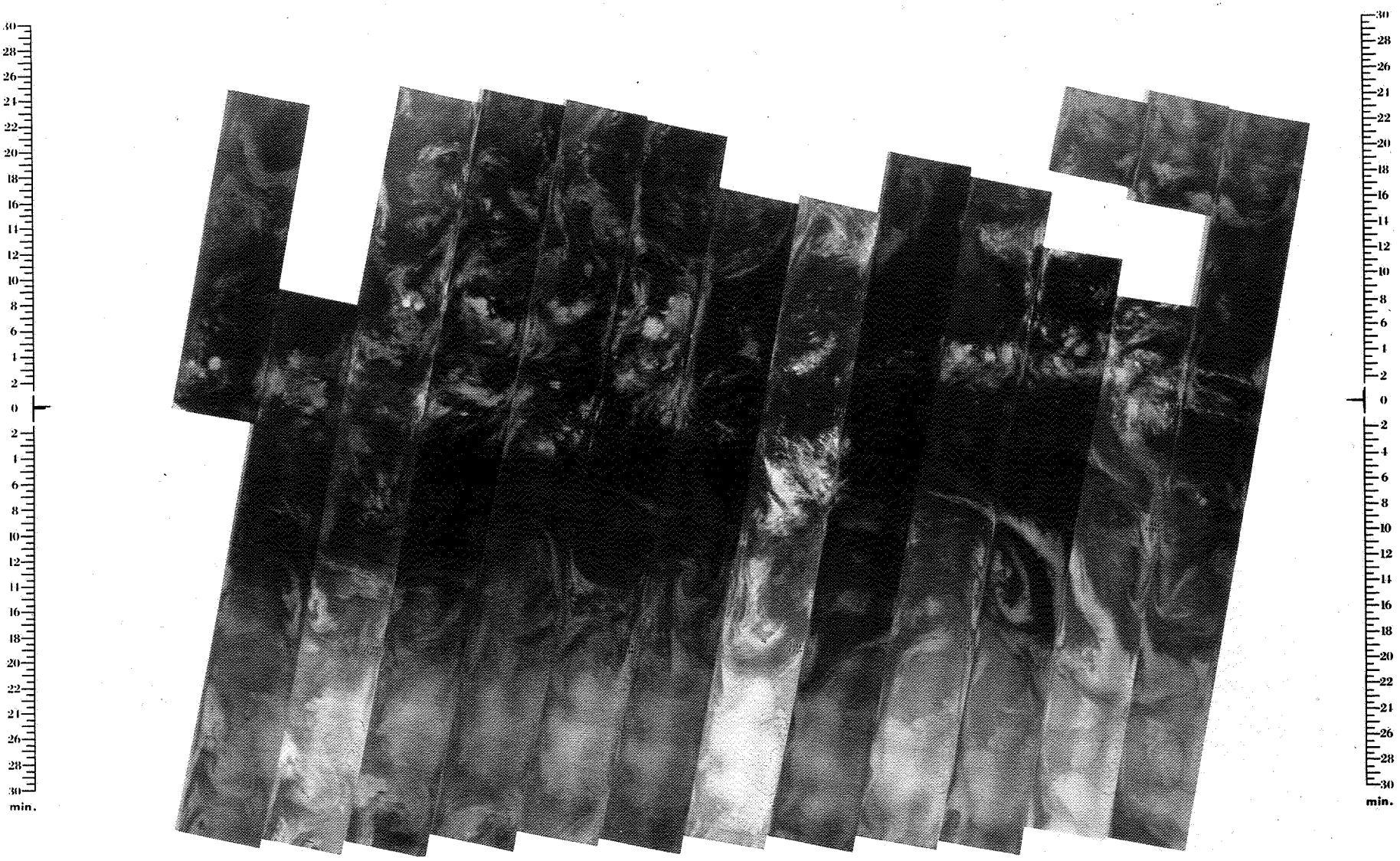


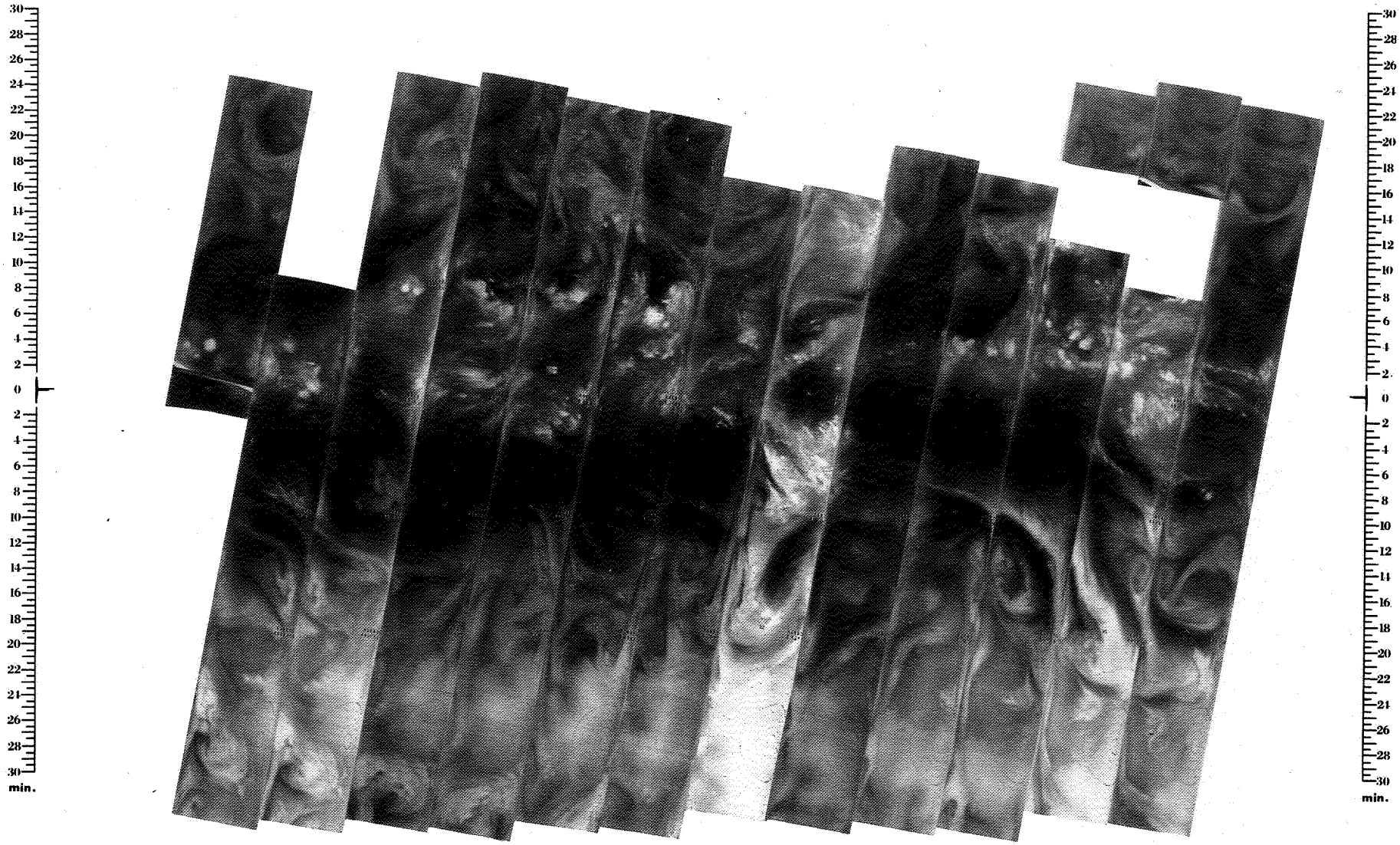
17 JULY 1973

6.7 μm


min.
min.
2949
2948
2947
2946
2945
2944
2943
2942
2941
2940
2939
2938
2937
2936
18 JULY 1973
11.5 μm

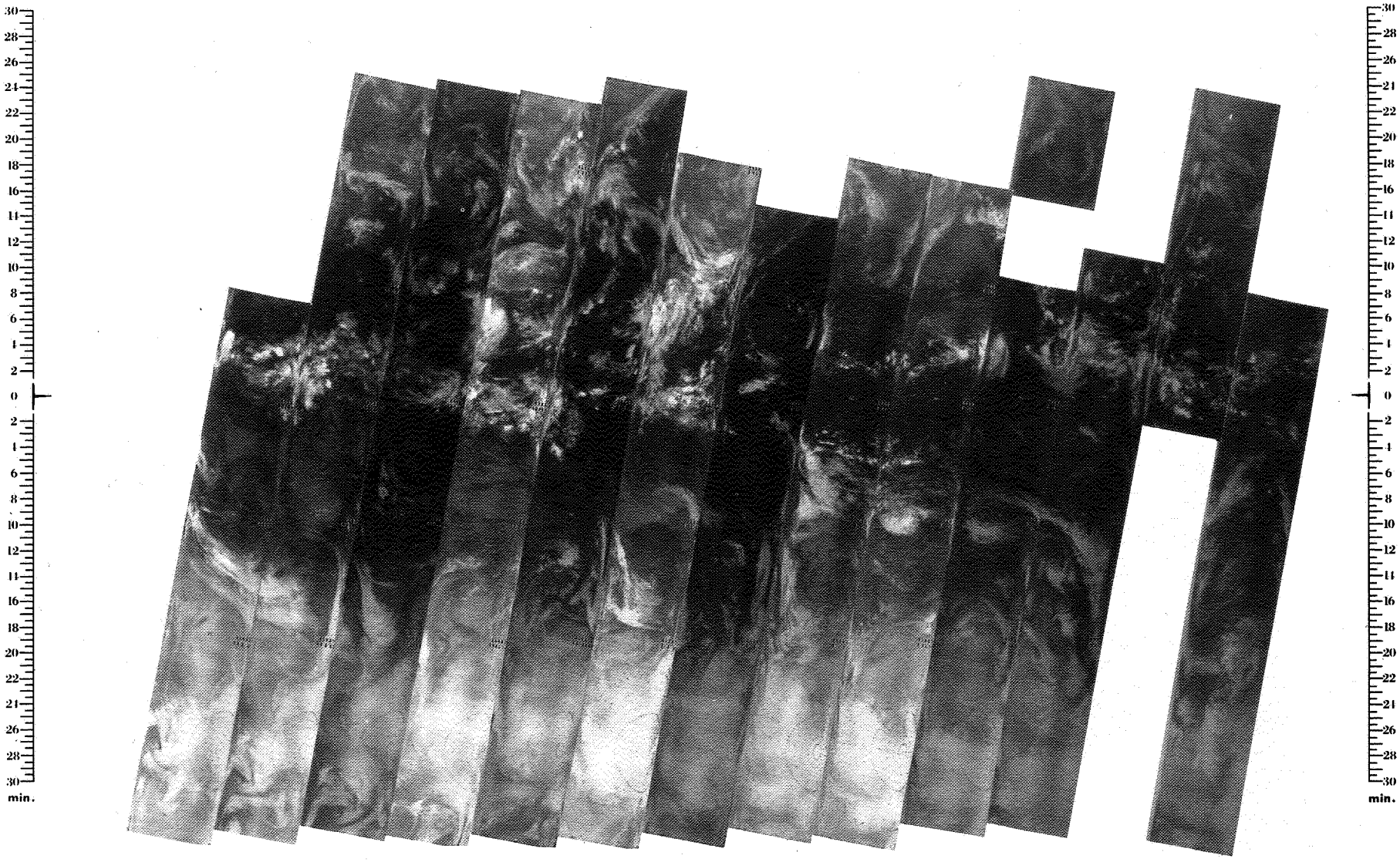

min.
min.
2949 2948 2947 2946 2945 2944 2943 2942 2941 2940 2939 2938 2937 2936
18 JULY 1973
6.7 μm

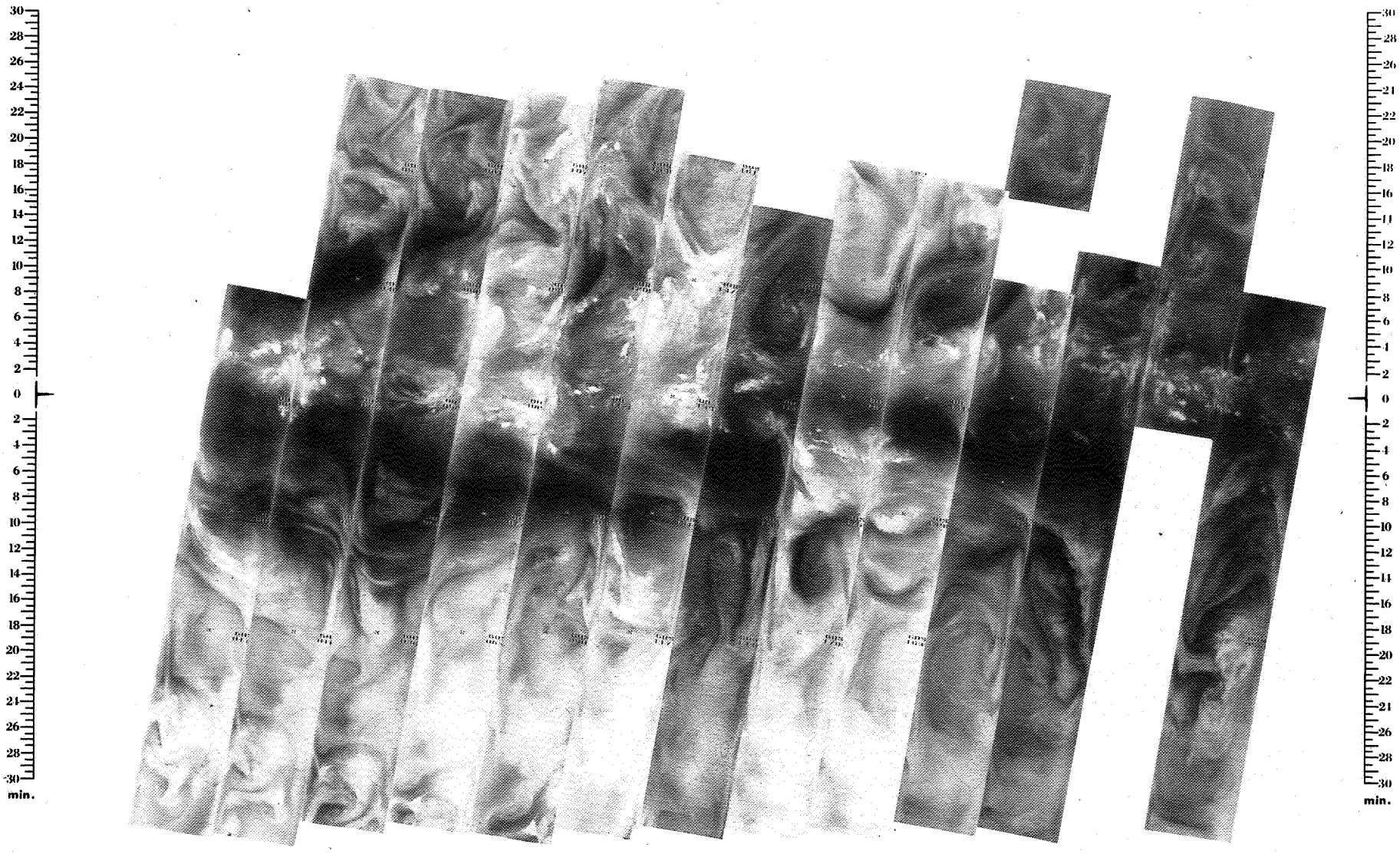

min.
min.
2962 2961 2960 2959 2958 2957 2956 2955 2954 2953 2952 2951 2950
19 JULY 1973
11.5 µm

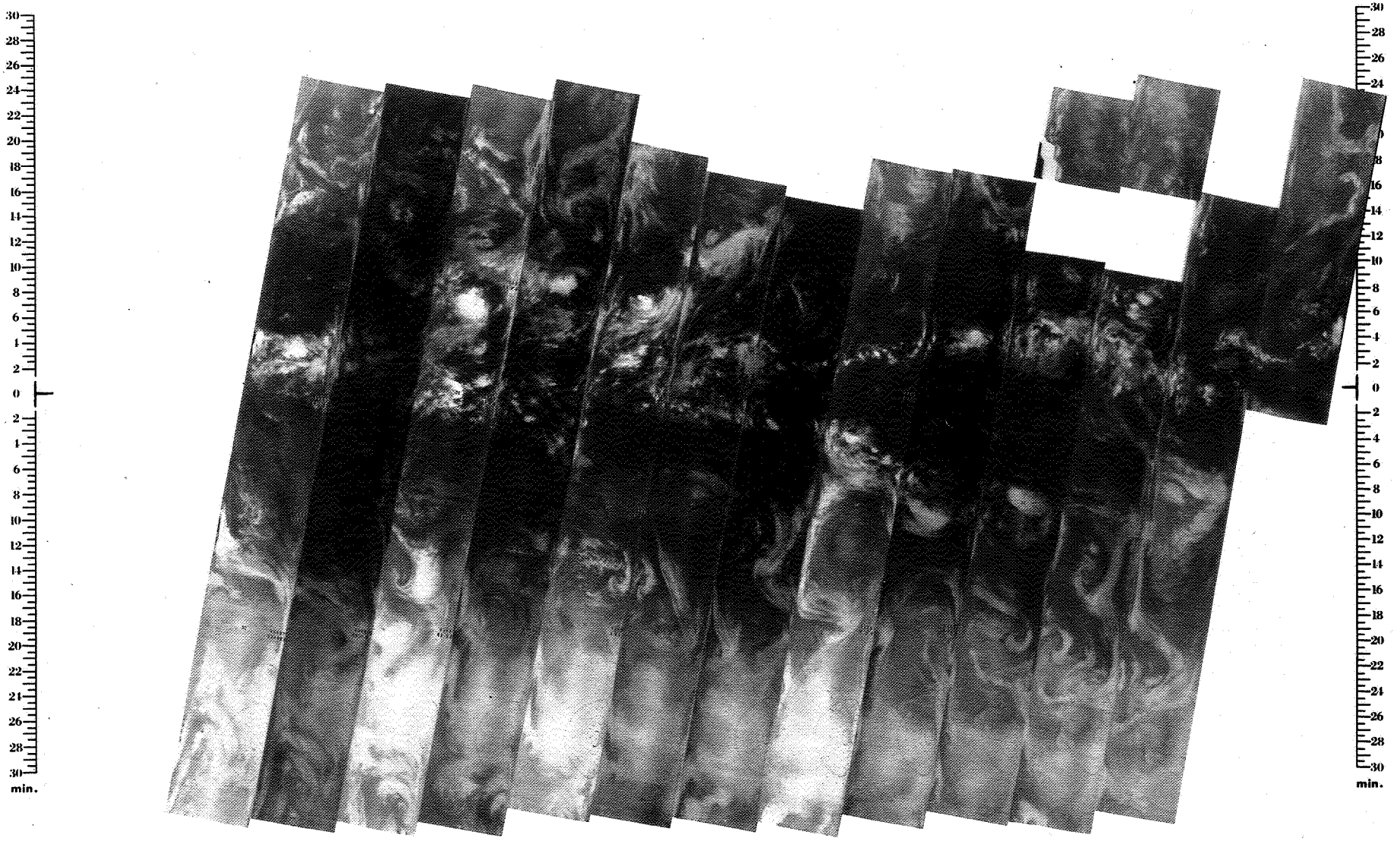


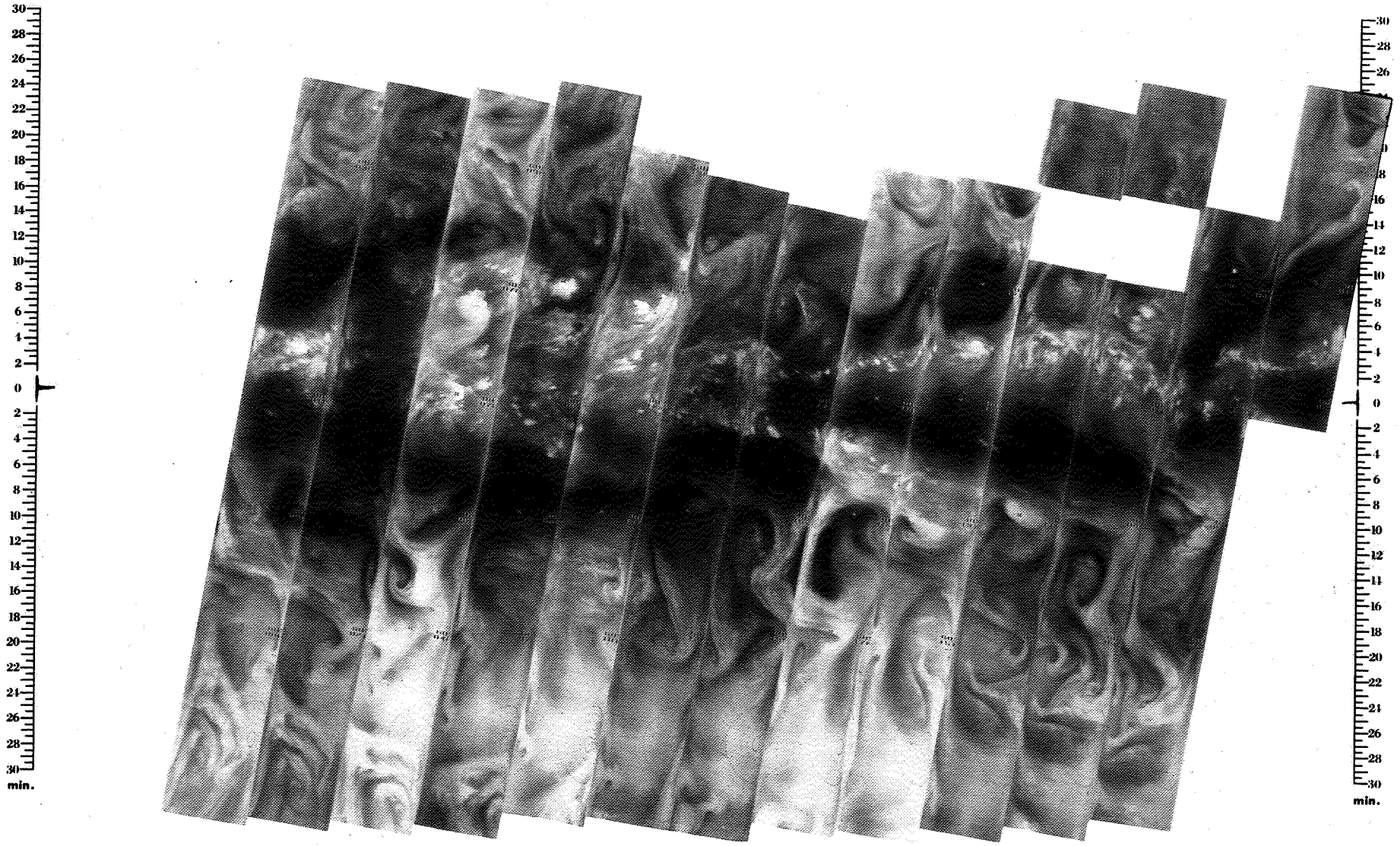
19 JULY 1973

6.7 μm


min.
min.
2975 2974 2973 2972 2971 2970 2969 2968 2967 2966 2965 2964 2963
20 JULY 1973
11.5 μm

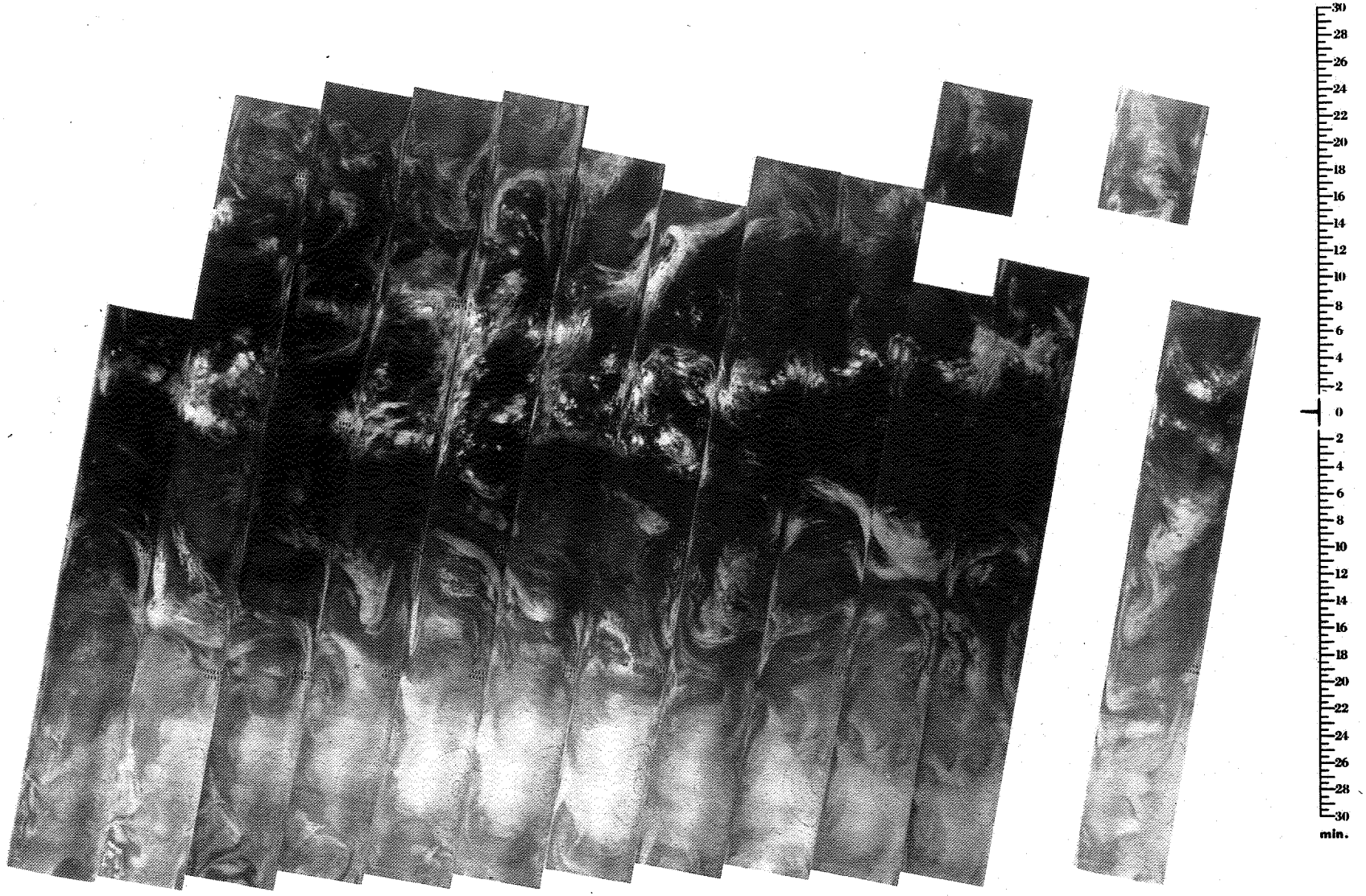

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min.
2975 2974 2973 2972 2971 2970 2969 2968 2967 2966 2965 2964 2963
20 JULY 1973
6.7 μm

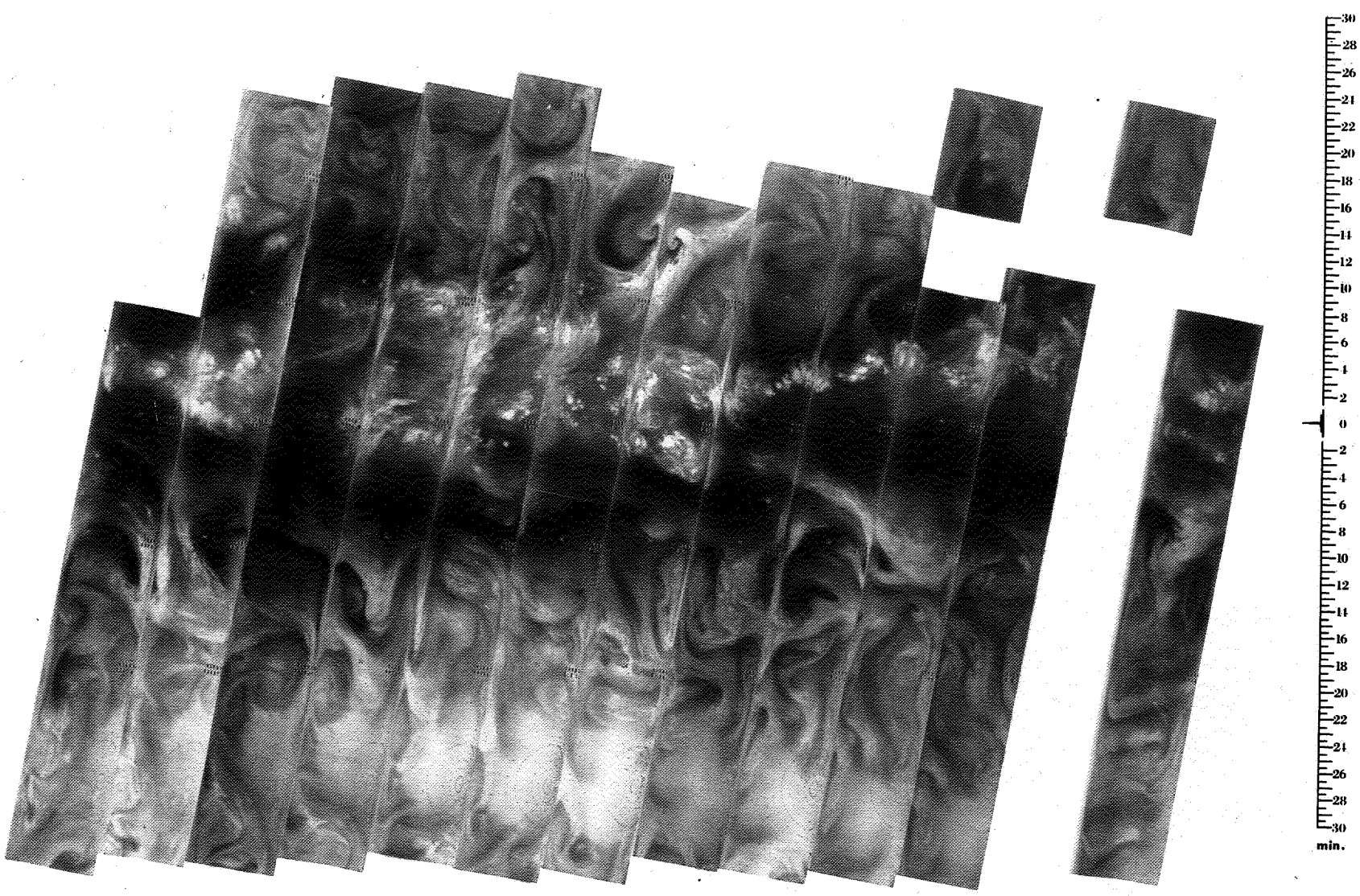

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min.
2989 2988 2987 2986 2985 2984 2983 2982 2981 2980 2979 2978 2977 2976
21 JULY 1973
11.5 μm

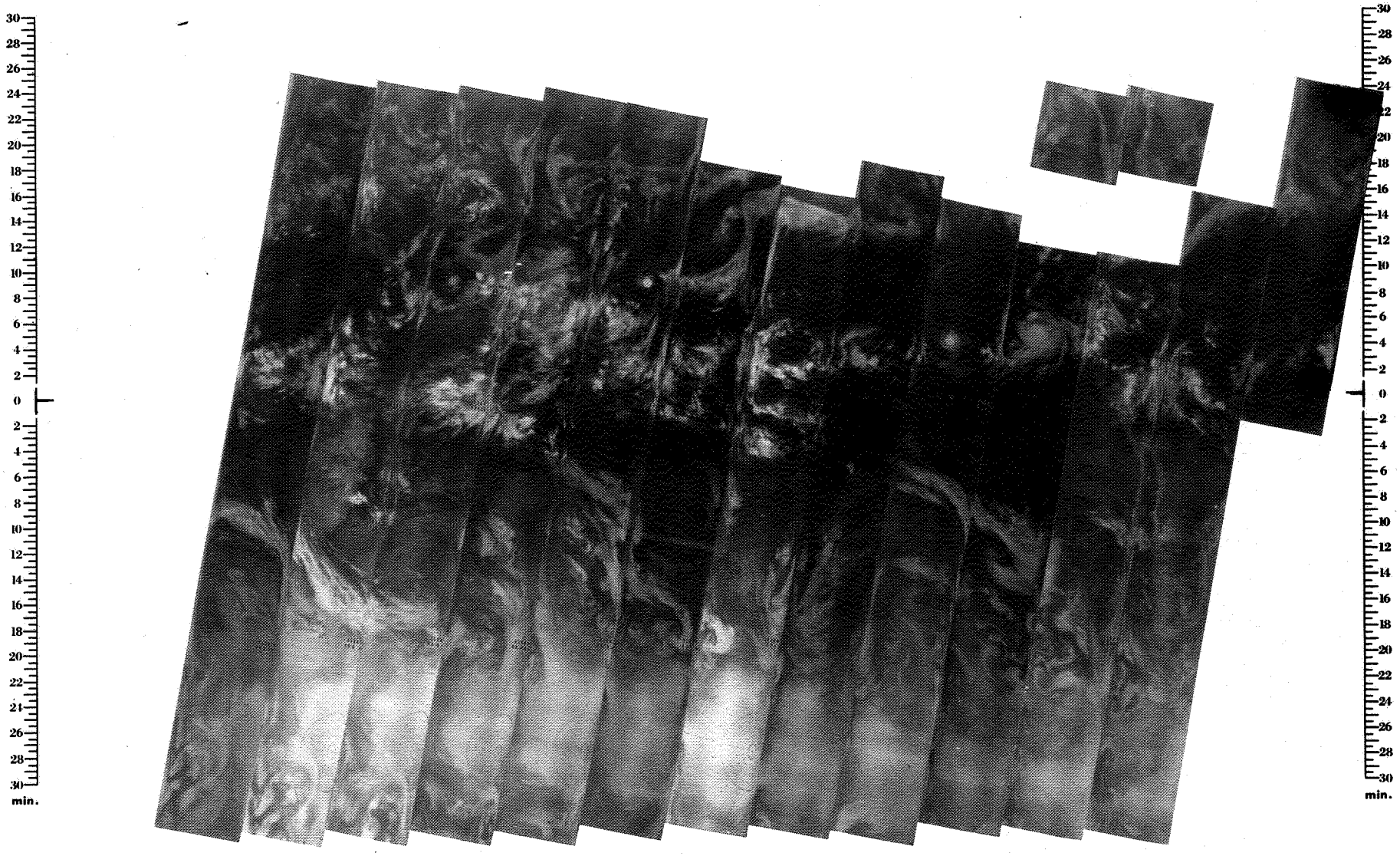


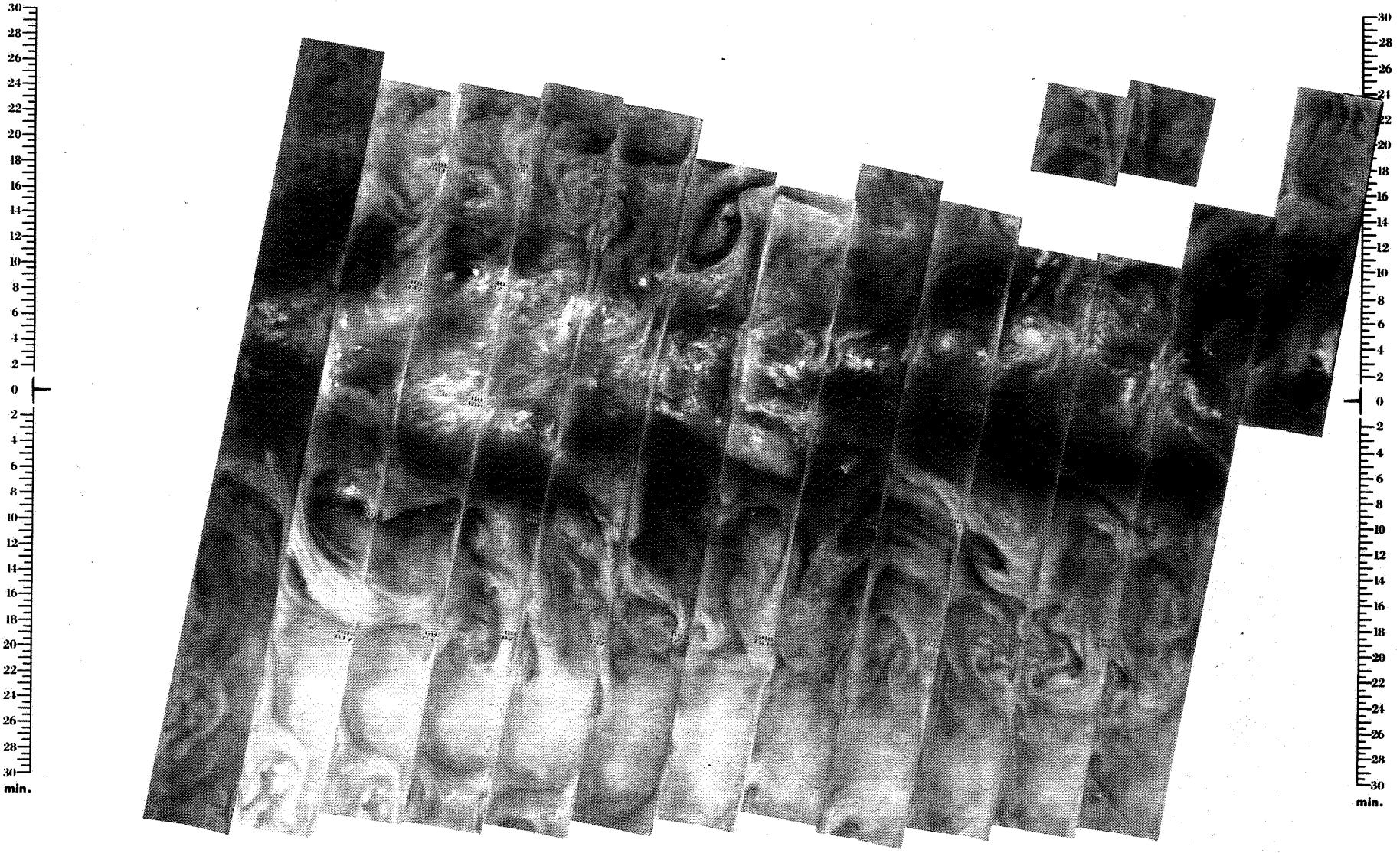
21 JULY 1973

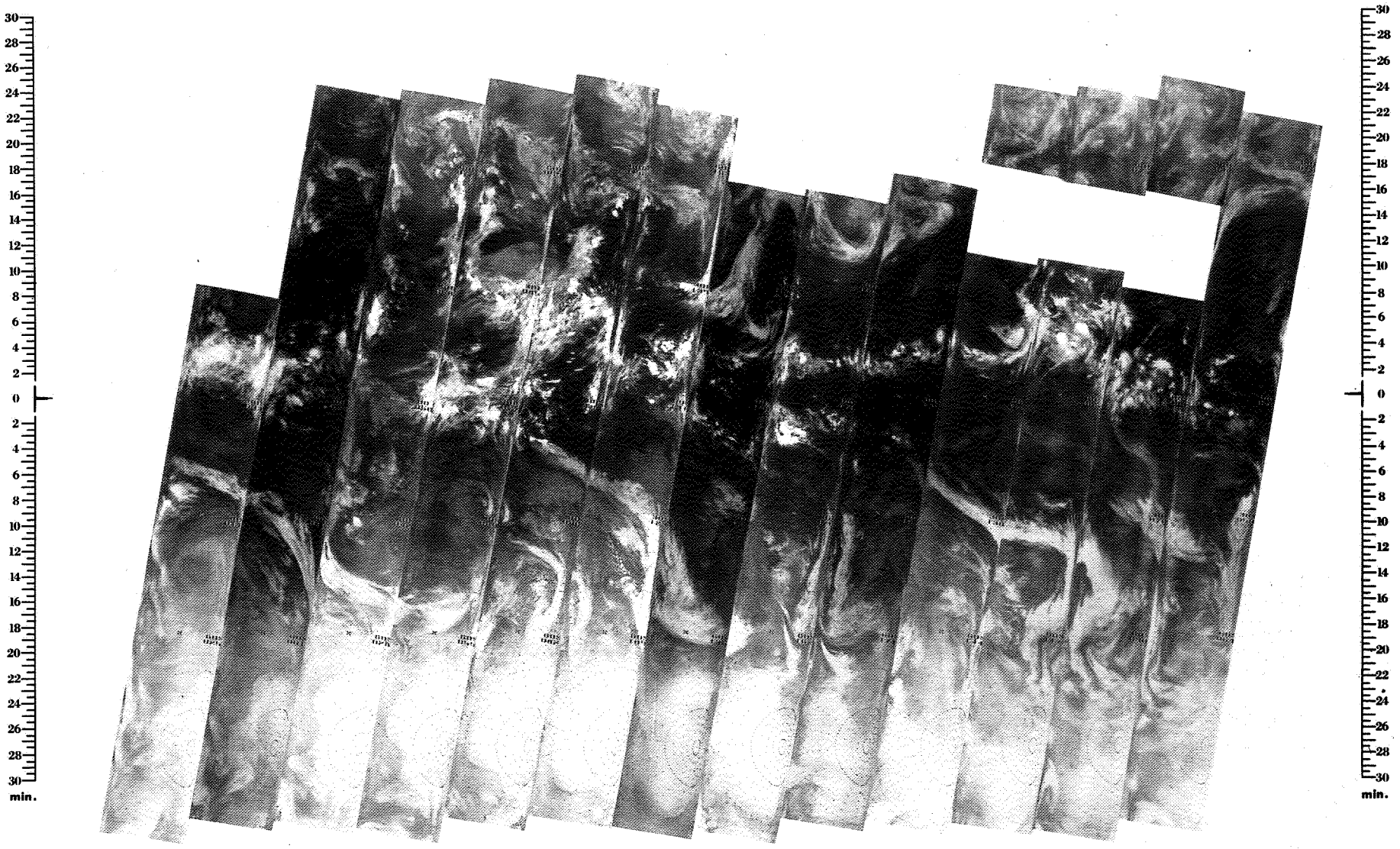
6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
3002 3001 3000 2999 2998 2997 2996 2995 2994 2993 2992 2991 2990
22 JULY 1973
11.5 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
3002 3001 3000 2999 2998 2997 2996 2995 2994 2993 2992 2991 2990
22 JULY 1973
6.7 µm

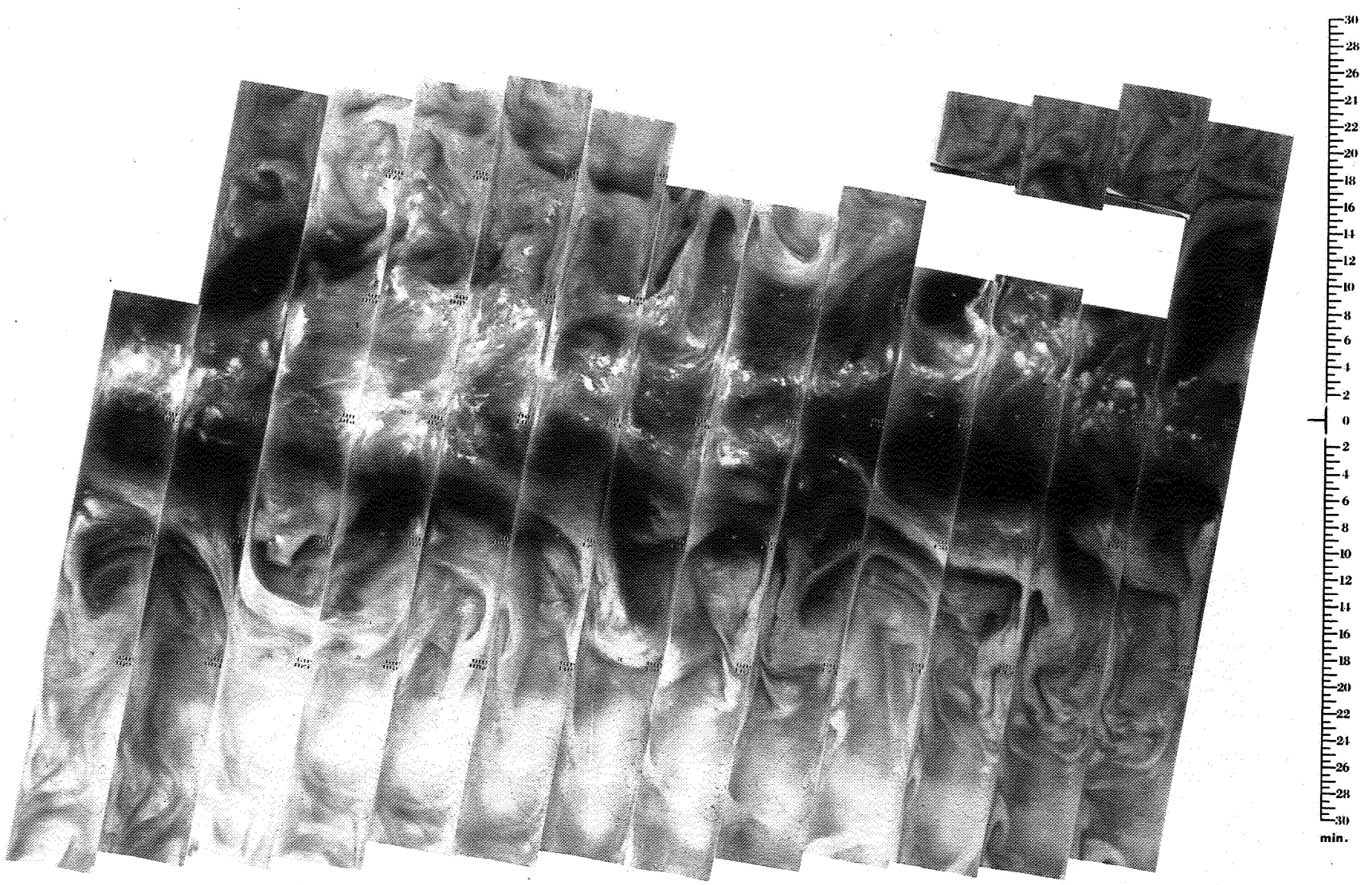

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min.
3016 3015 3014 3013 3012 3011 3010 3009 3008 3007 3006 3005 3004 3003
23 JULY 1973
11.5 μm

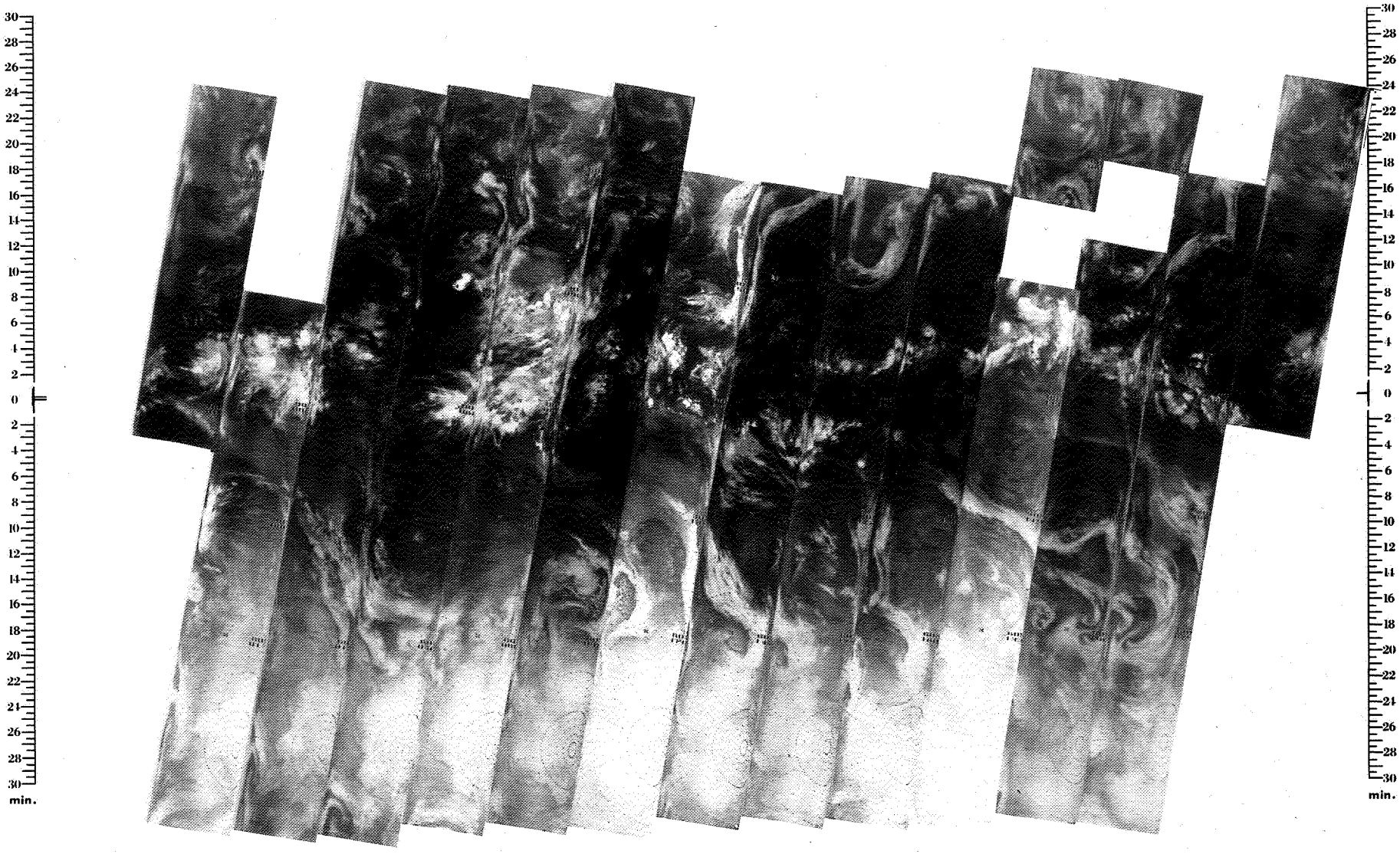

min.
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23 JULY 1973
6.7 μm

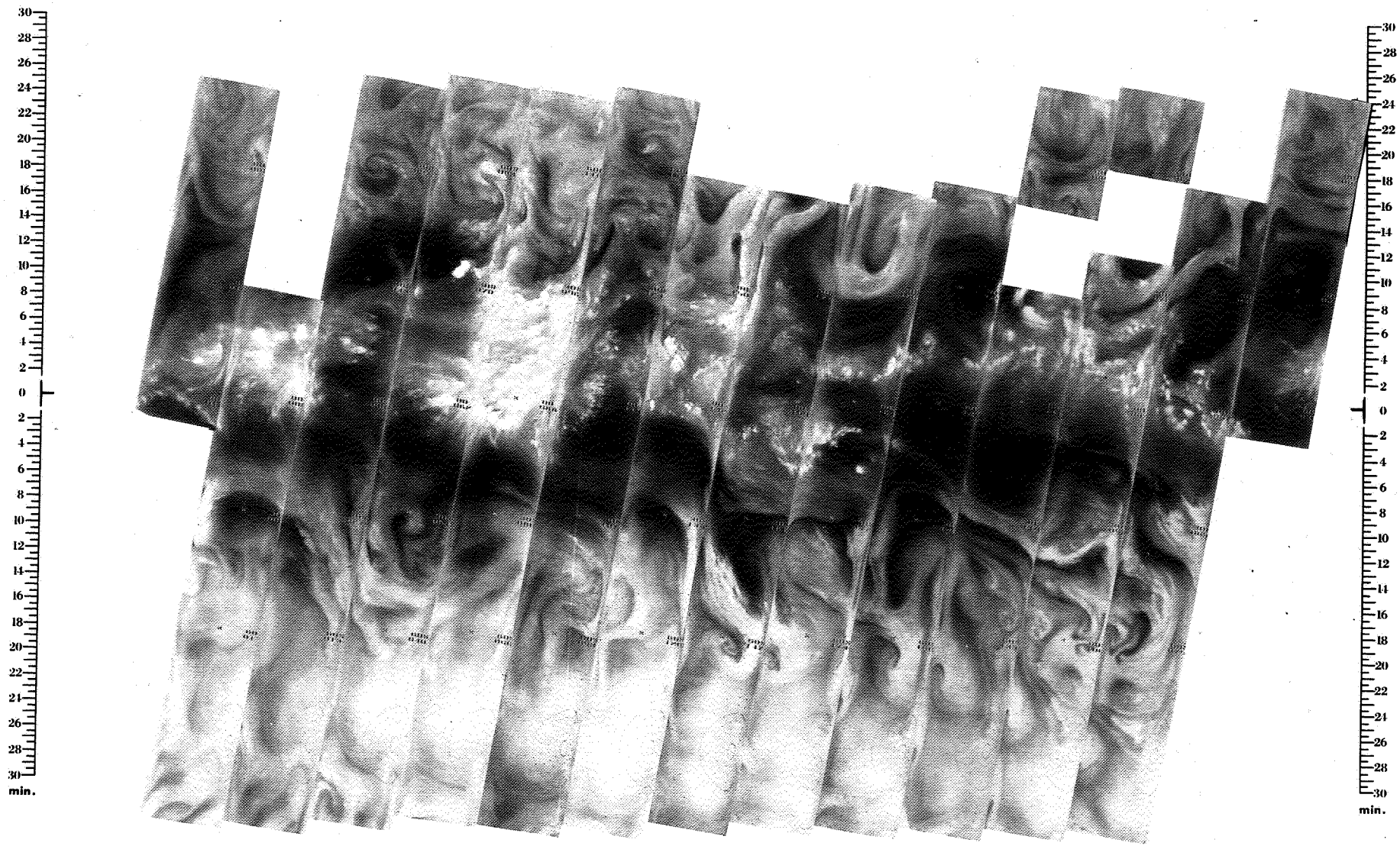


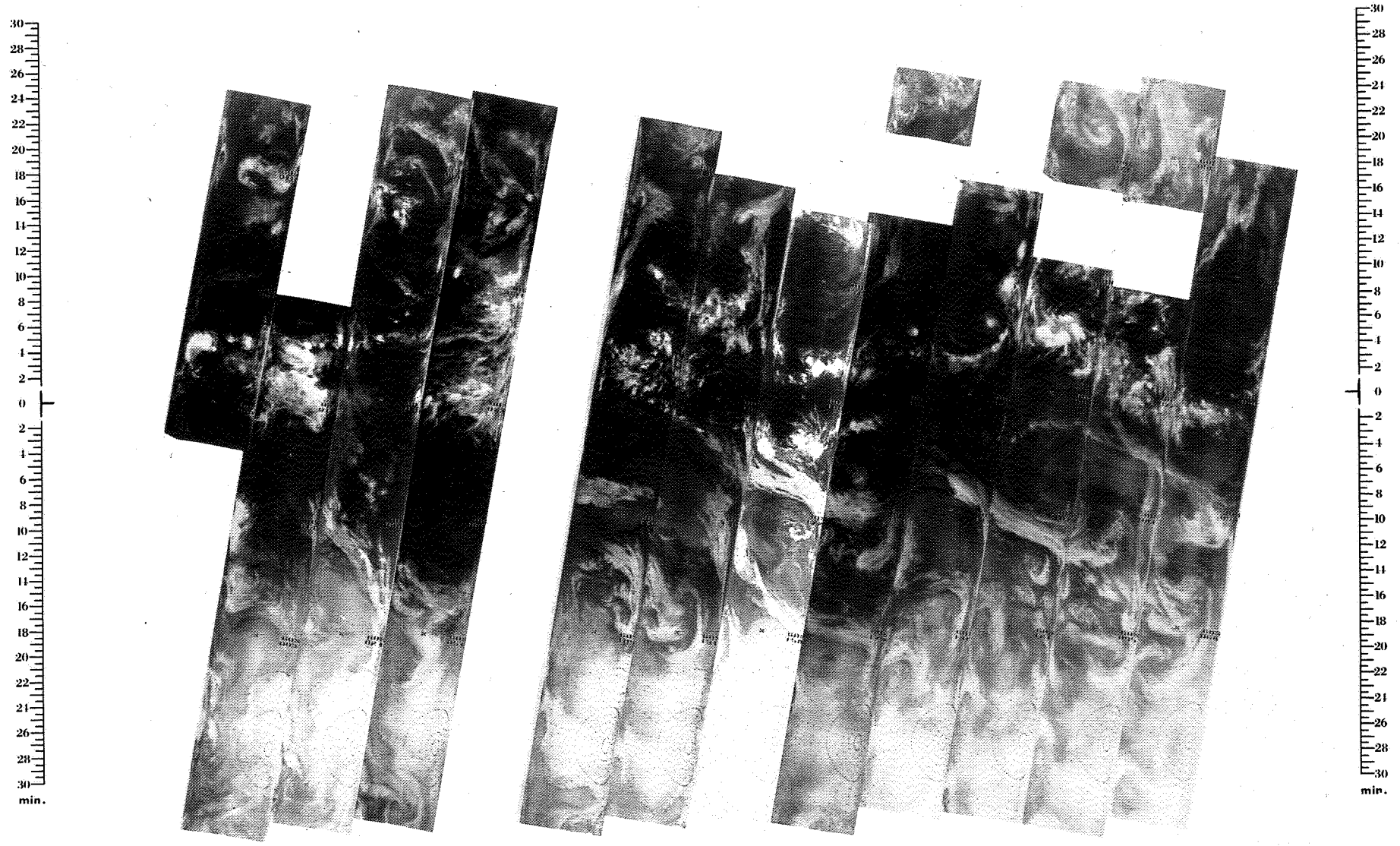
24 JULY 1973

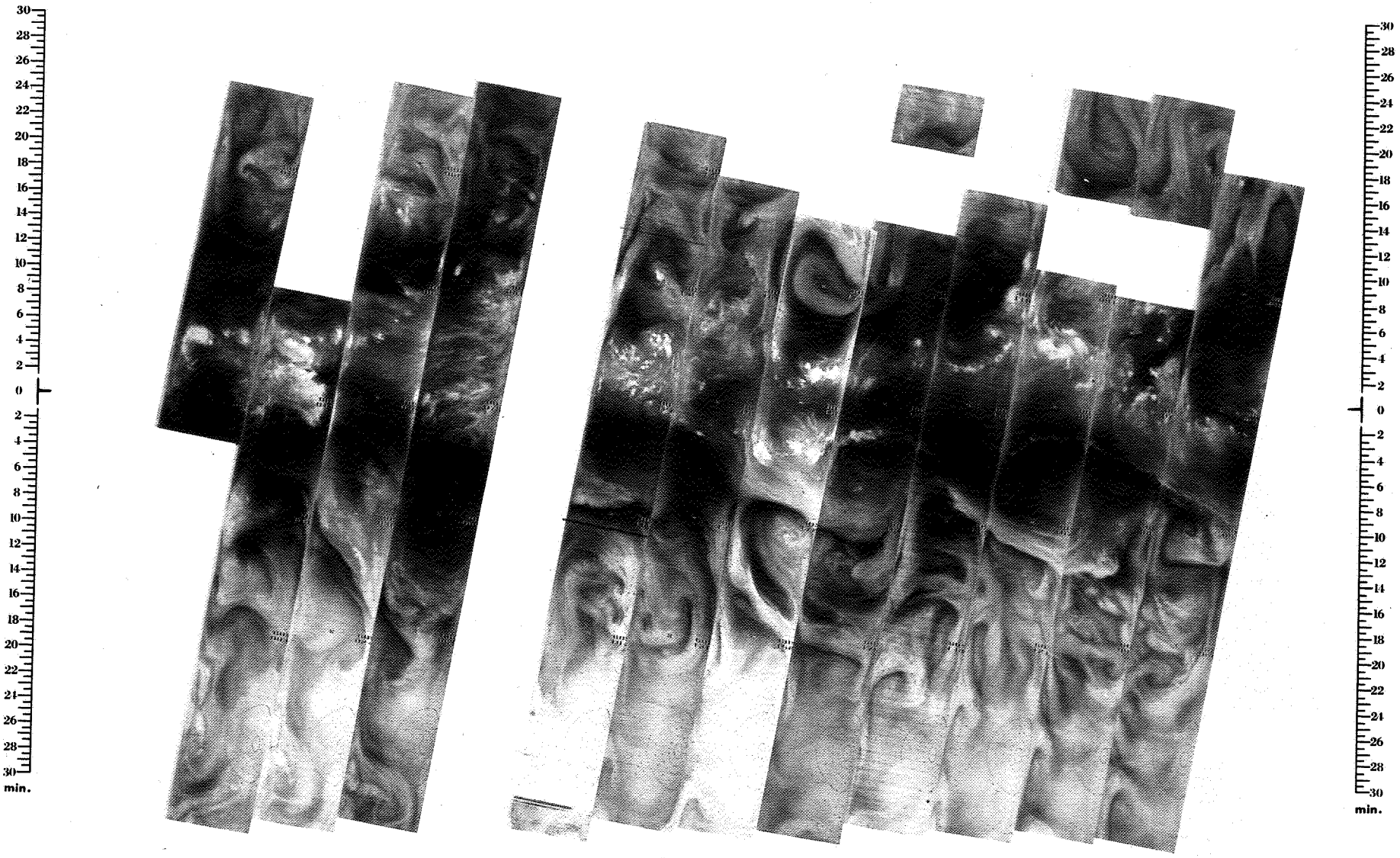
11.5 μm

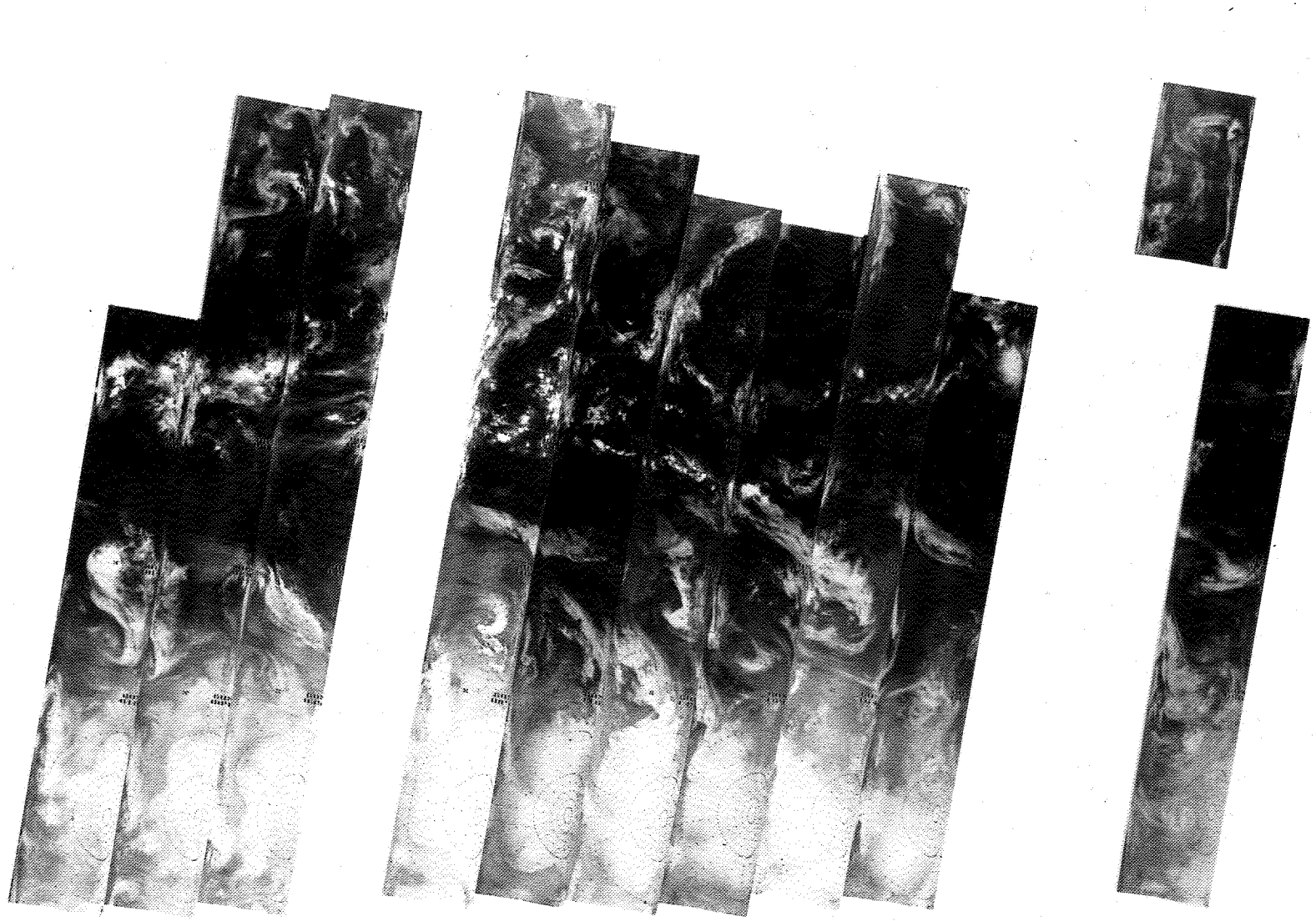

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
3029 3028 3027 3026 3025 3024 3023 3022 3021 3020 3019 3018 3017
24 JULY 1973
6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
3043 3042 3041 3040 3039 3038 3037 3036 3035 3034 3033 3032 3031 3030
25 JULY 1973
11.5 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
3043 3042 3041 3040 3039 3038 3037 3036 3035 3034 3033 3032 3031 3030
25 JULY 1973
6.7 μm

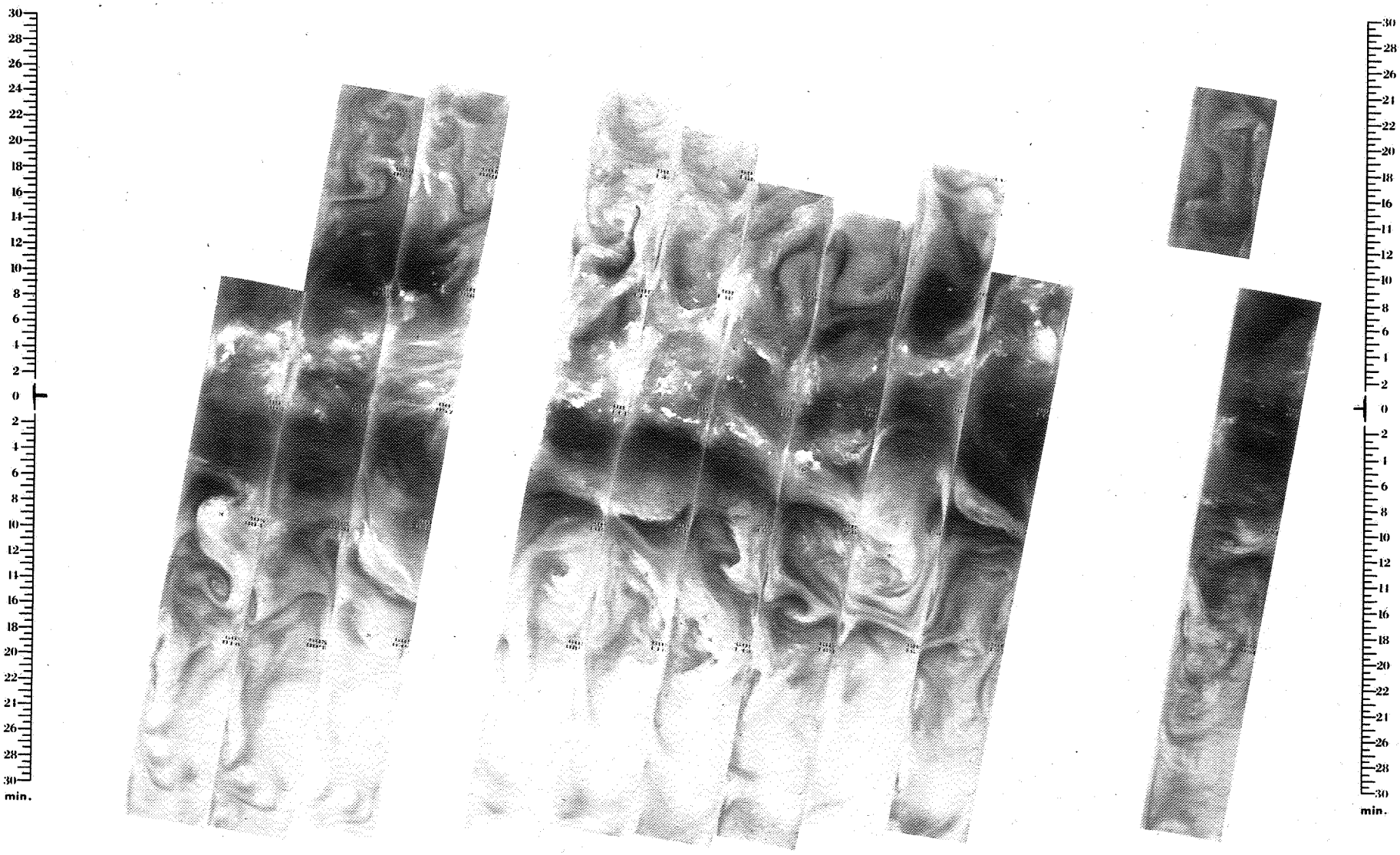

min.
min.
3056
3055
3054
3053
3052
3051
3050
3049
3048
3047
3046
3045
3044
26 JULY 1973
11.5 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
3056 3055 3054 3053 3052 3051 3050 3049 3048 3047 3046 3045 3044
26 JULY 1973
6.7 μm



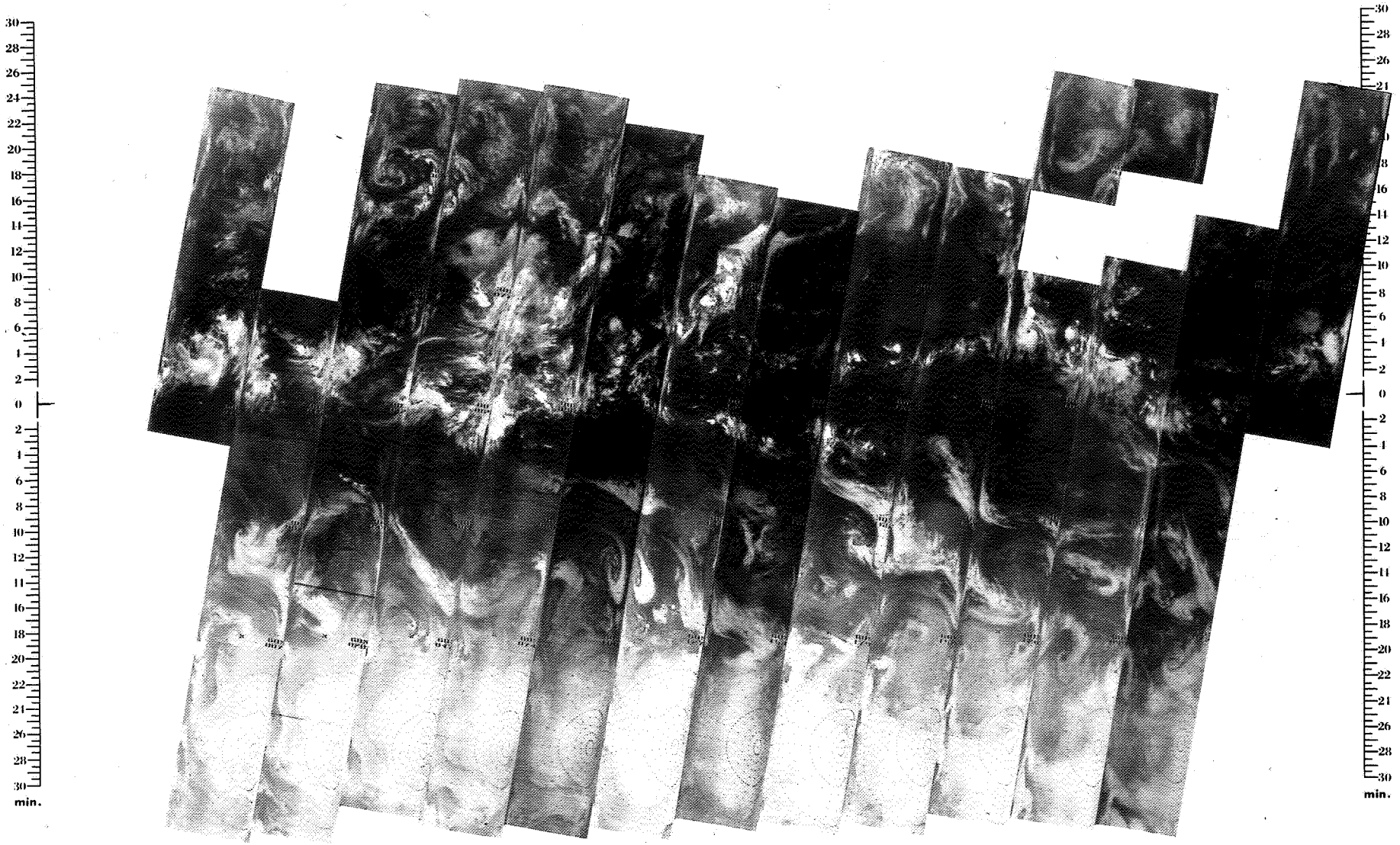
27 JULY 1973

11.5 μm



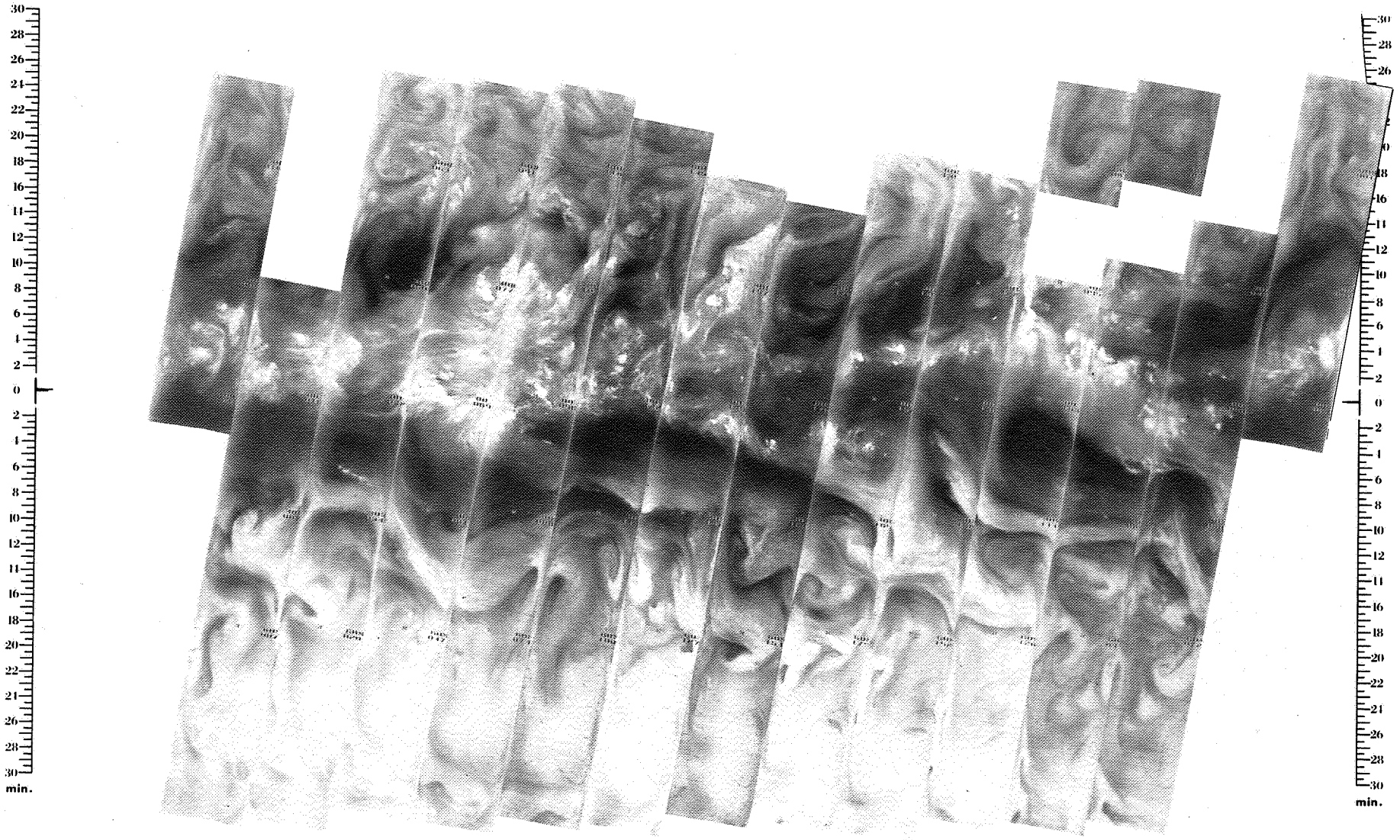
27 JULY 1973

6.7 μm



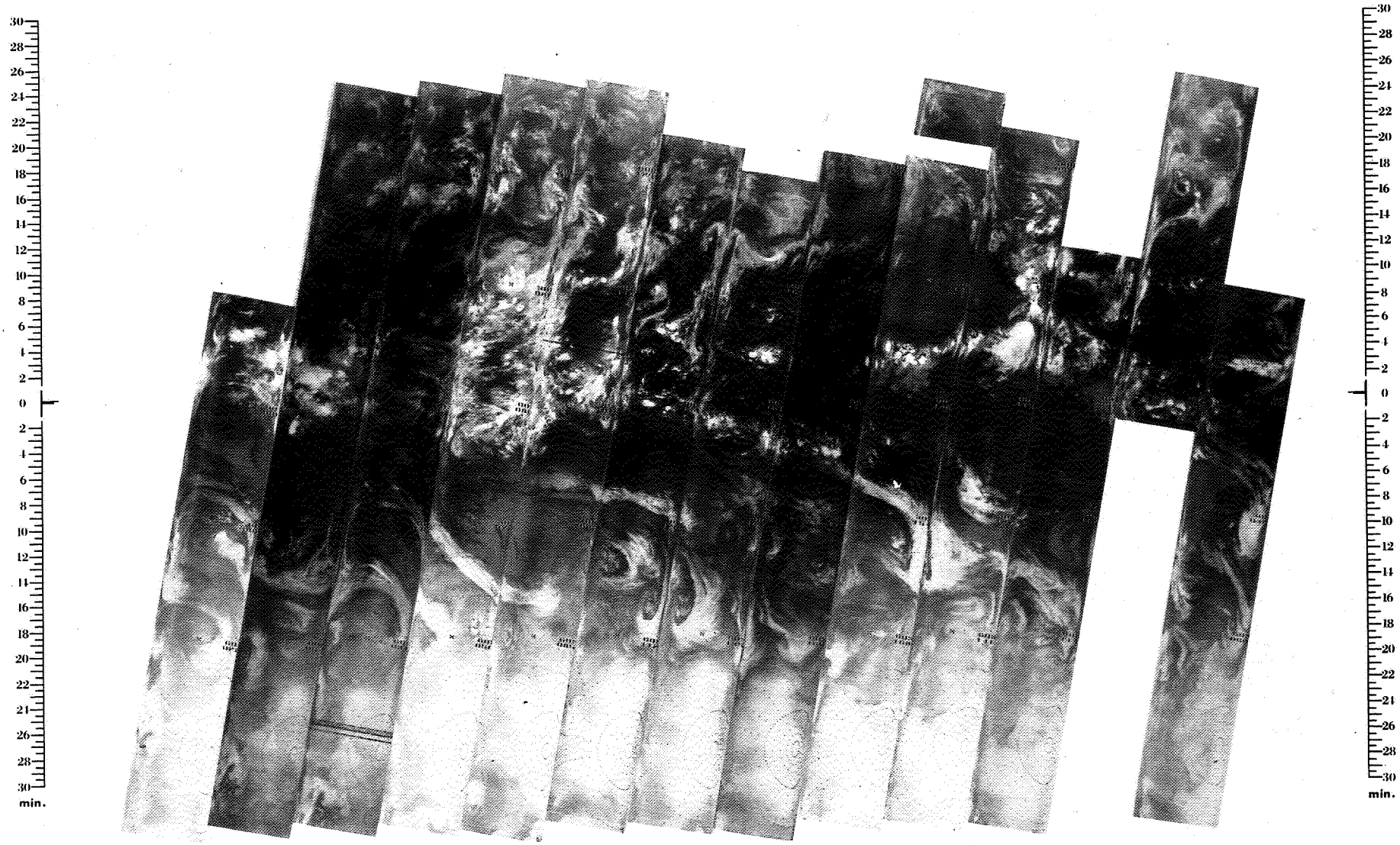
28 JULY 1973

11.5 μm



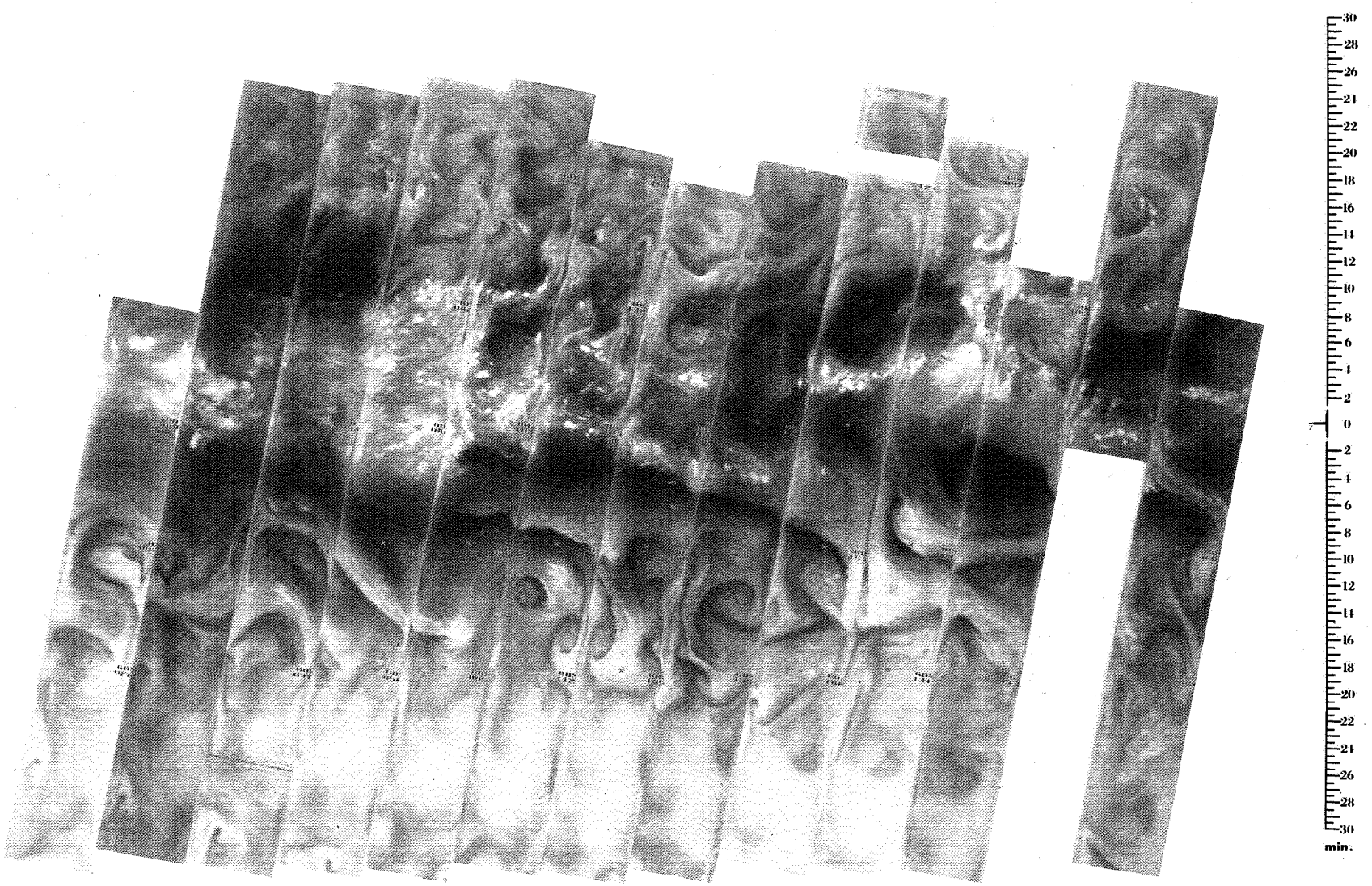
28 JULY 1973

6.7 μm



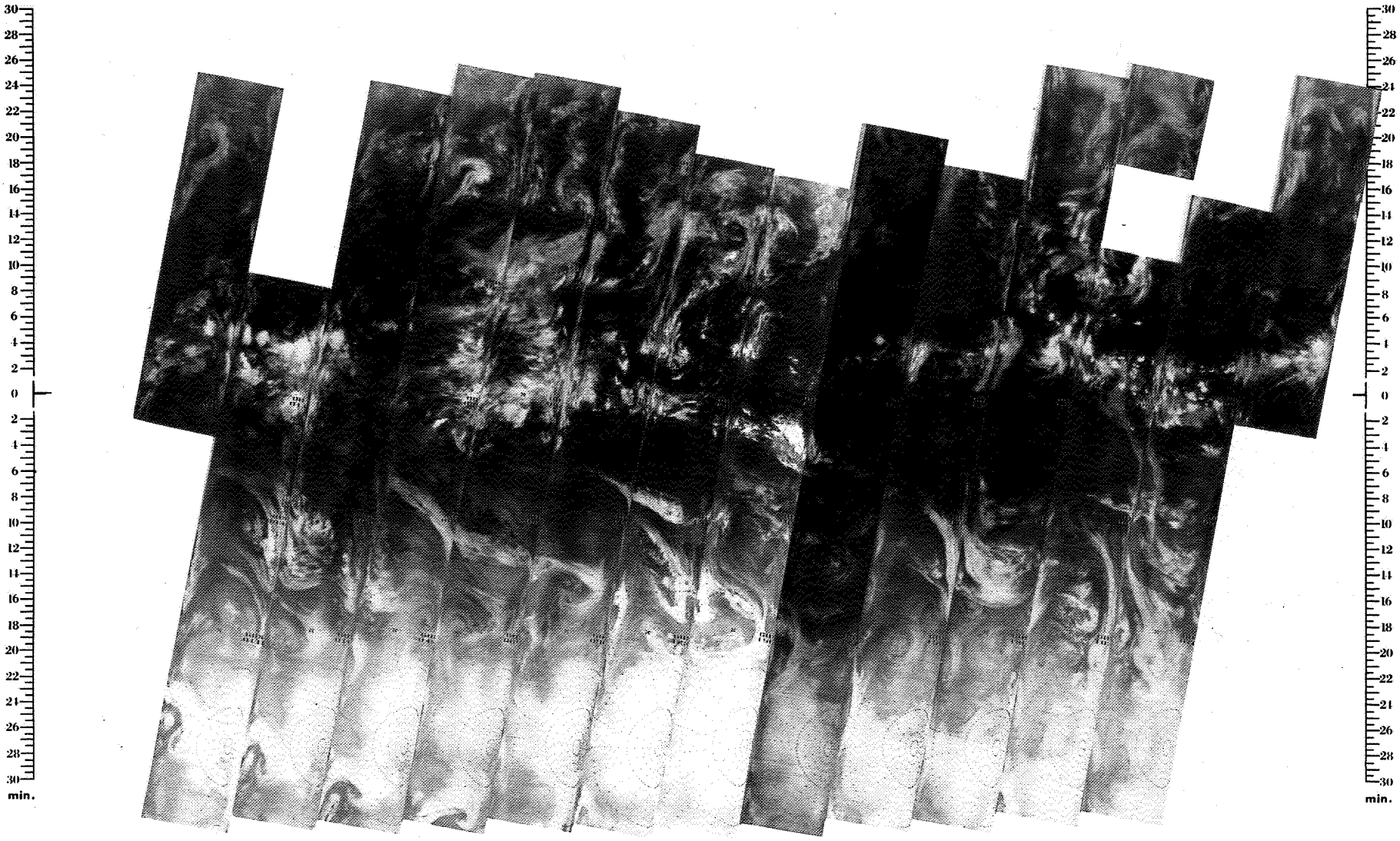
29 JULY 1973

11.5 μm



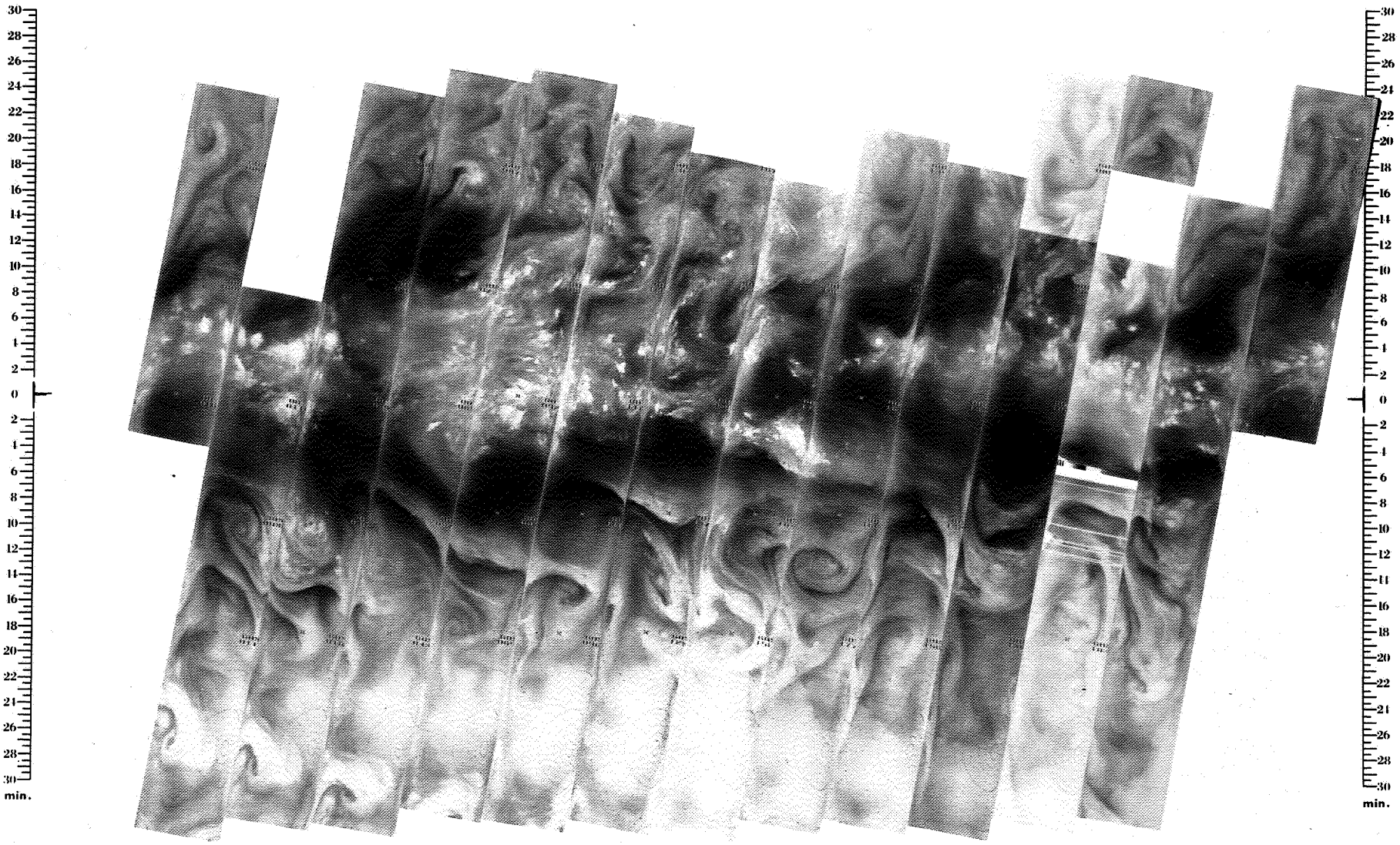
29 JULY 1973

6.7 μm



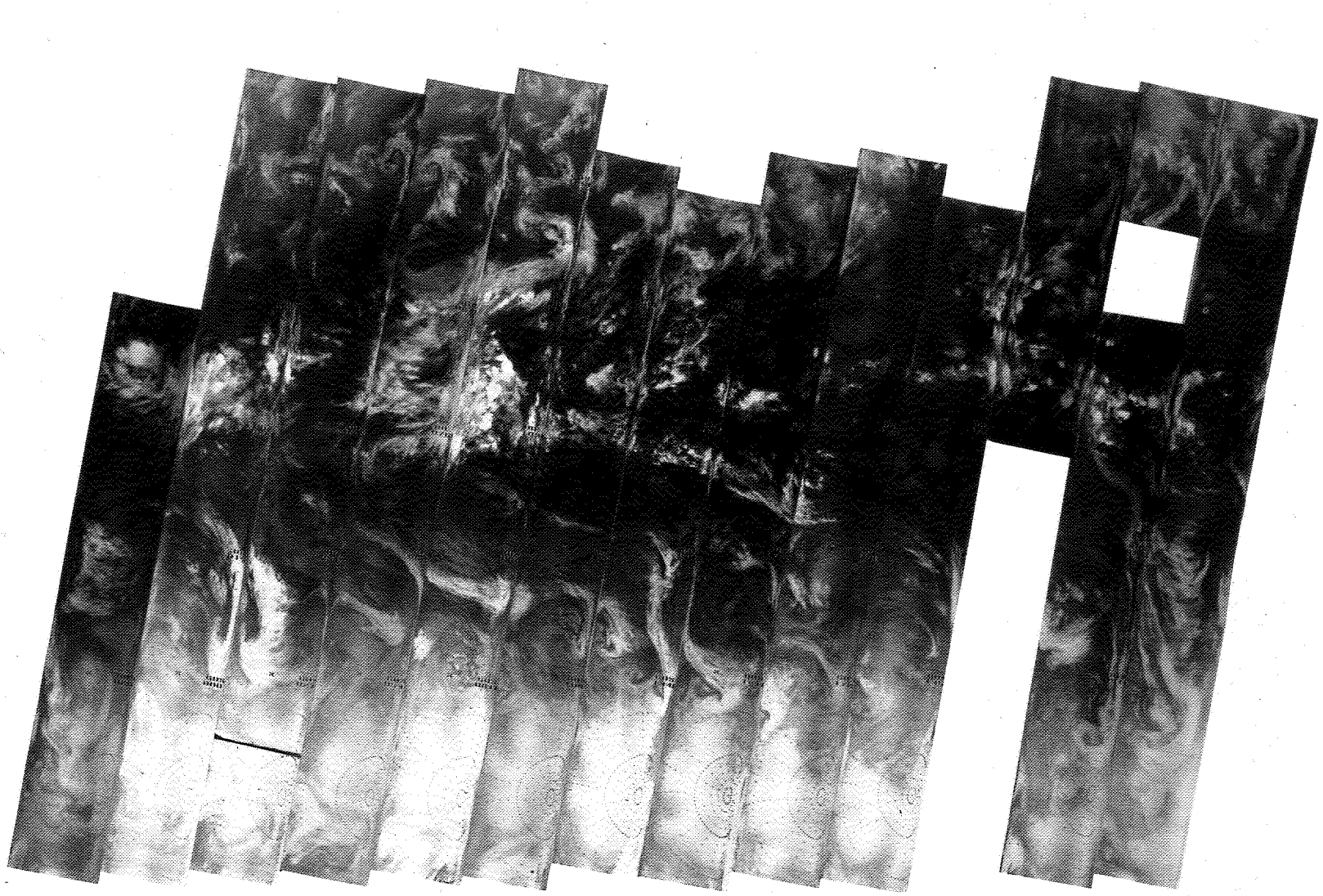
30 JULY 1973

11.5 μm



30 JULY 1973

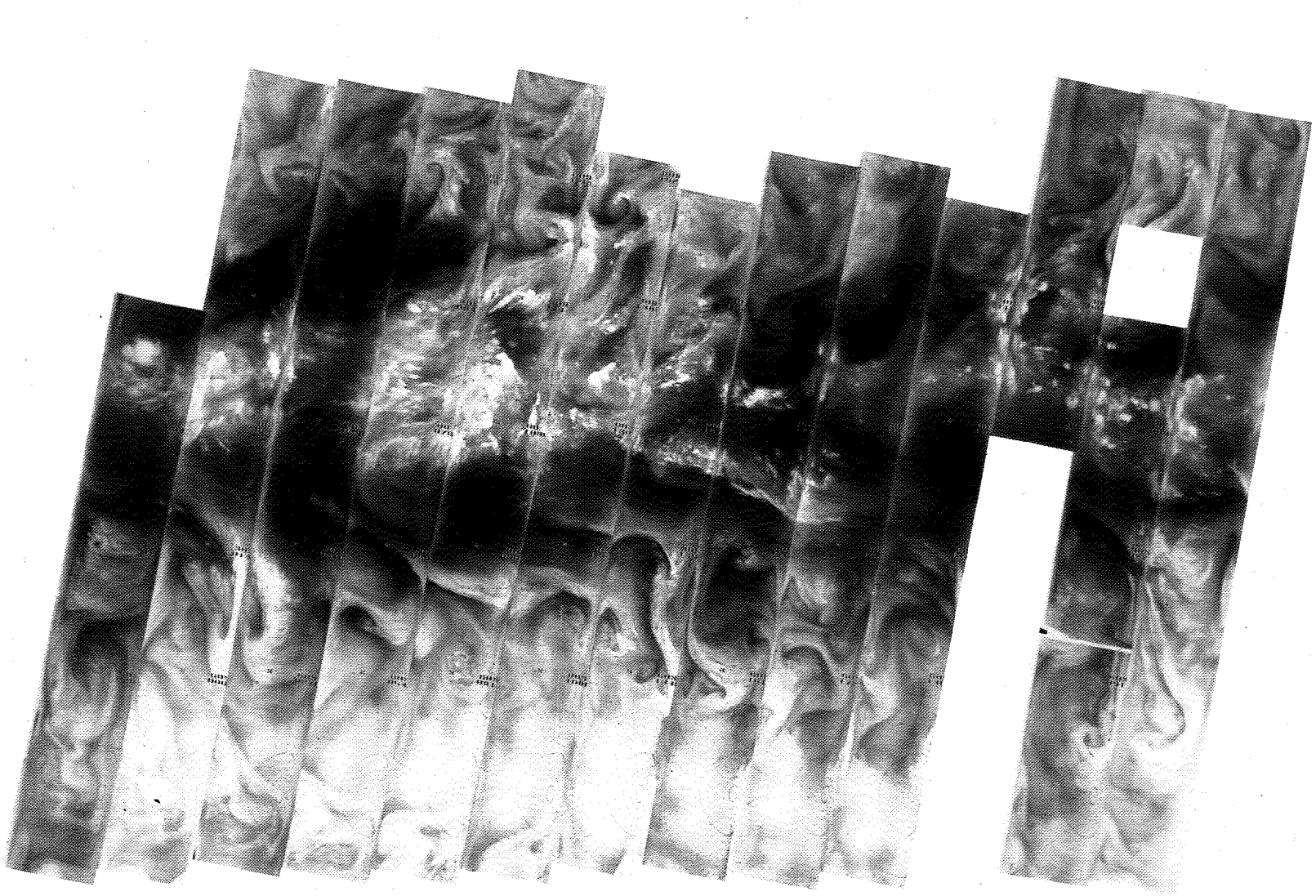
6.7 μm



3123 3122 3121 3120 3119 3118 3117 3116 3115 3114 3113 3112 3111

31 JULY 1973

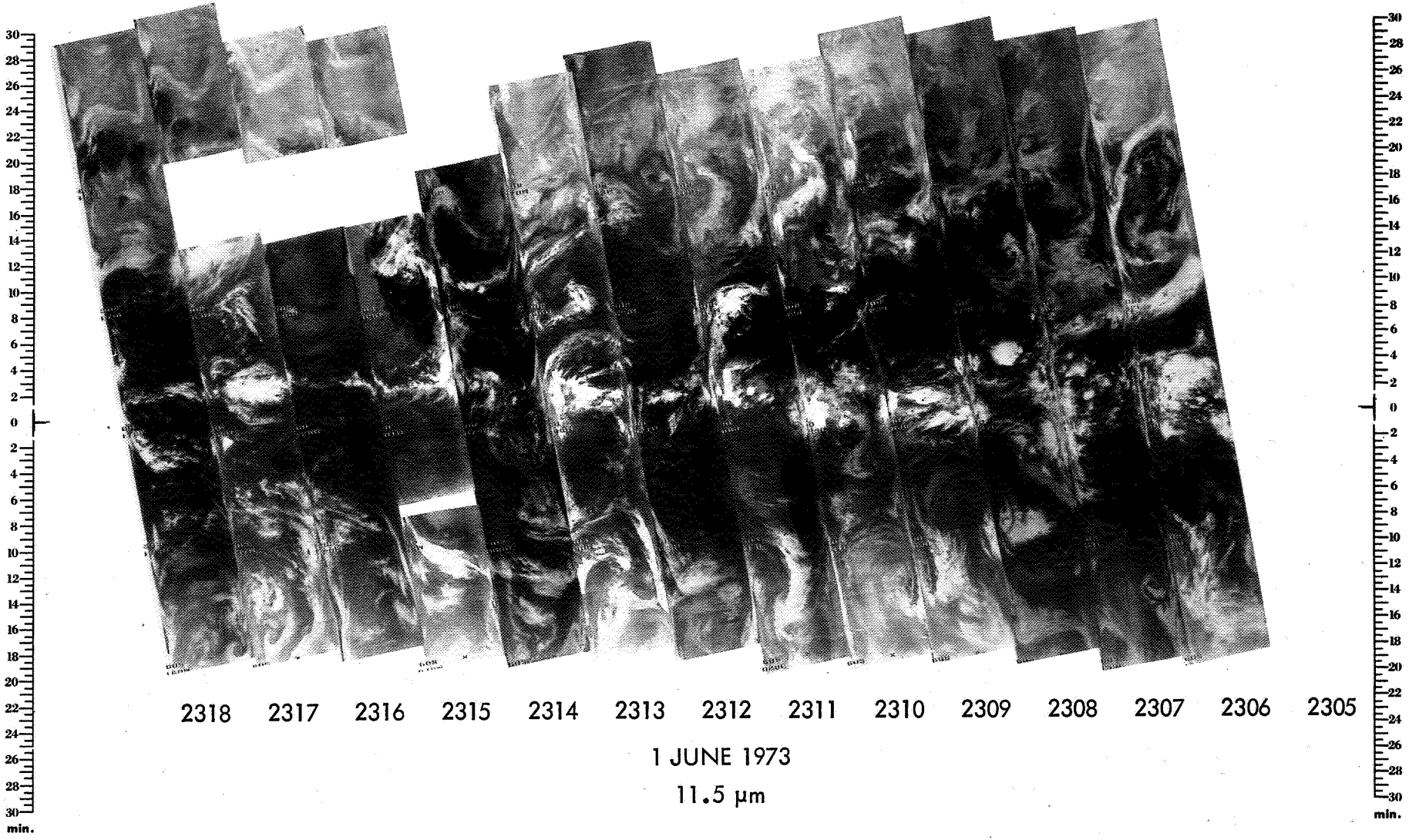
11.5 μm

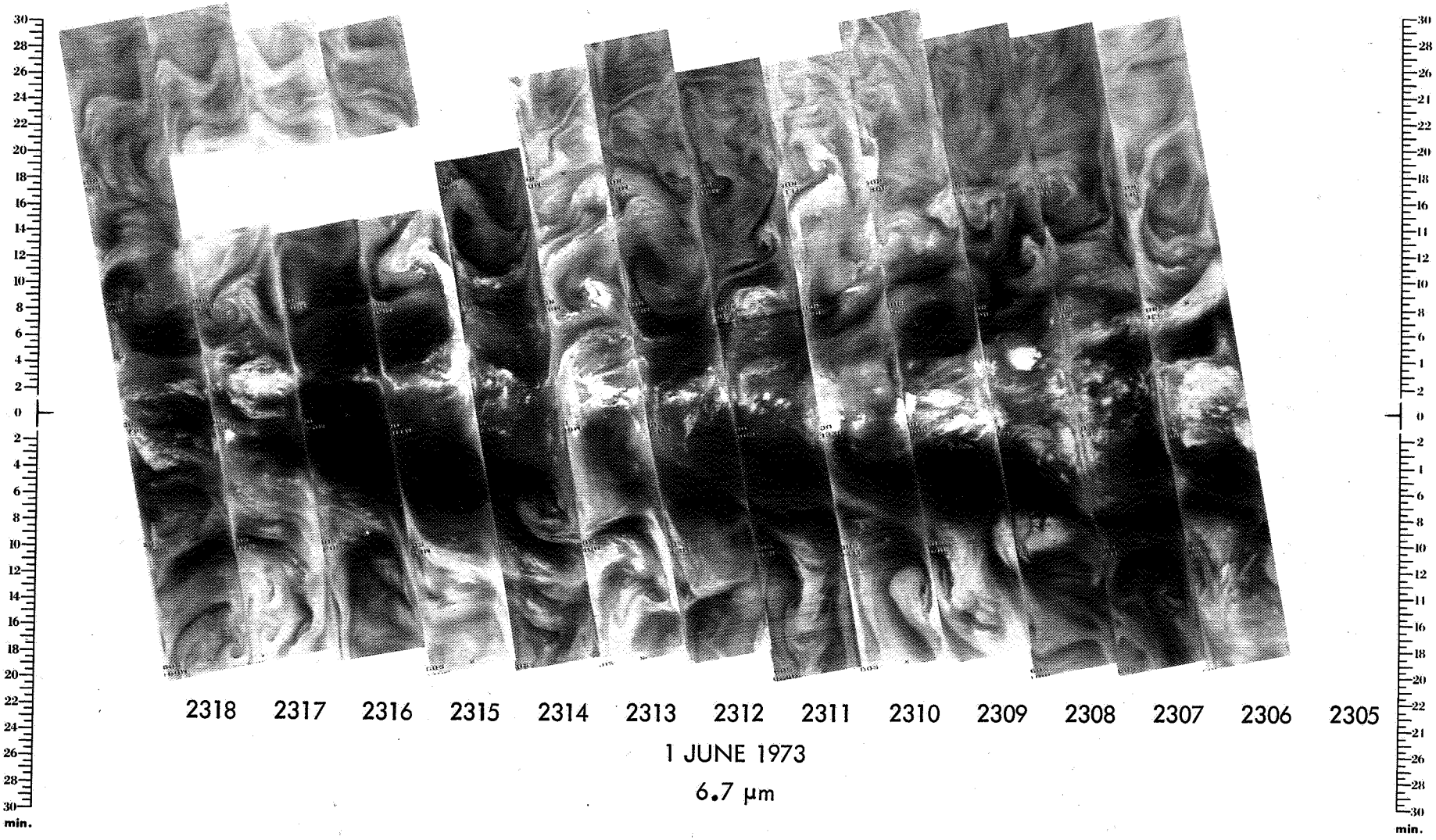


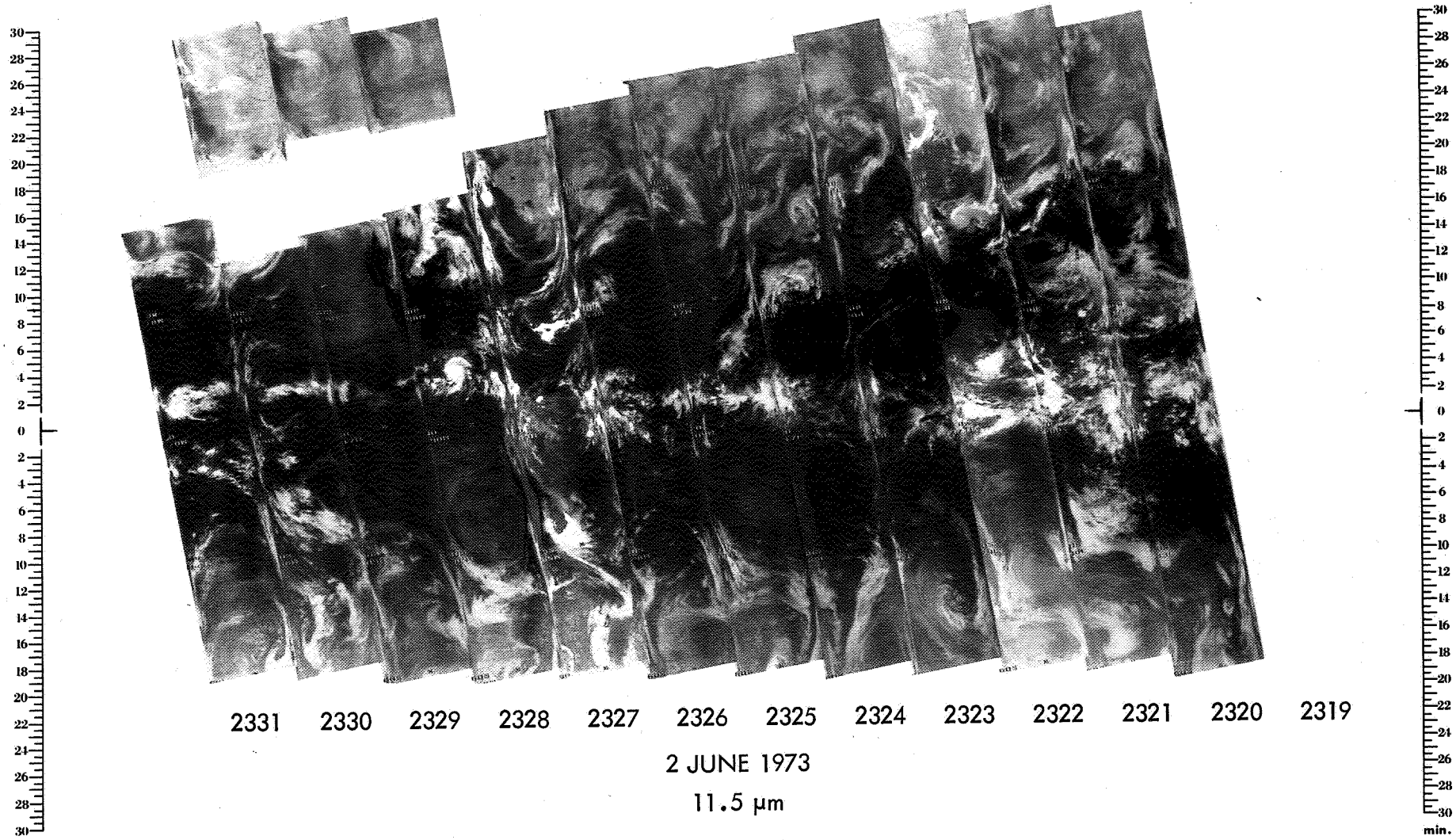
31 JULY 1973

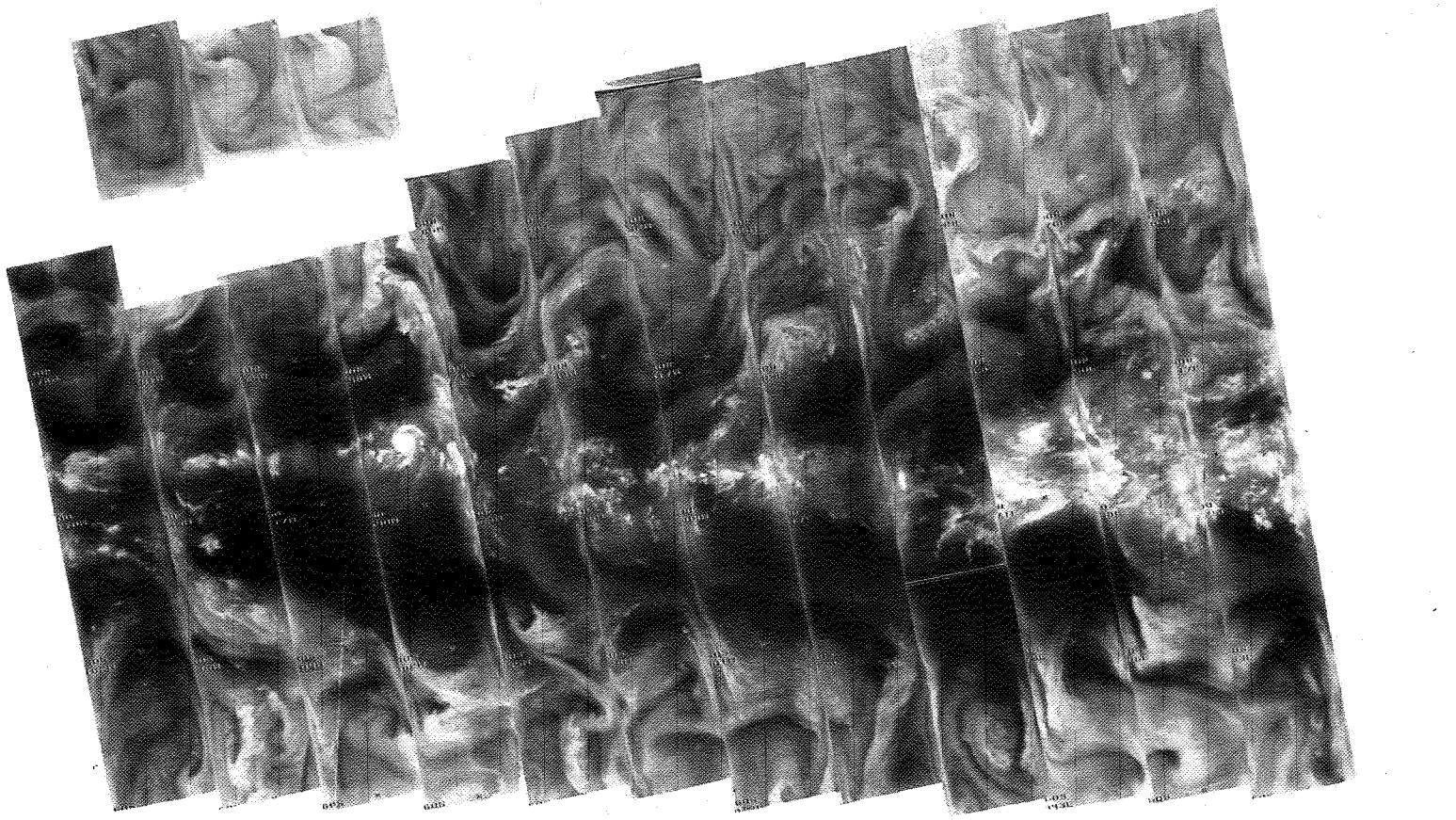
6.7 μm

SECTION 4.2
TEMPERATURE HUMIDITY INFRARED RADIOMETER
DAYTIME MONTAGES


2318 2317 2316 2315 2314 2313 2312 2311 2310 2309 2308 2307 2306 2305
1 JUNE 1973
11.5 μm
min.
min.


2318 2317 2316 2315 2314 2313 2312 2311 2310 2309 2308 2307 2306 2305
1 JUNE 1973
6.7 μm
min.
min.


2331 2330 2329 2328 2327 2326 2325 2324 2323 2322 2321 2320 2319
2 JUNE 1973
11.5 μm
min.
min.

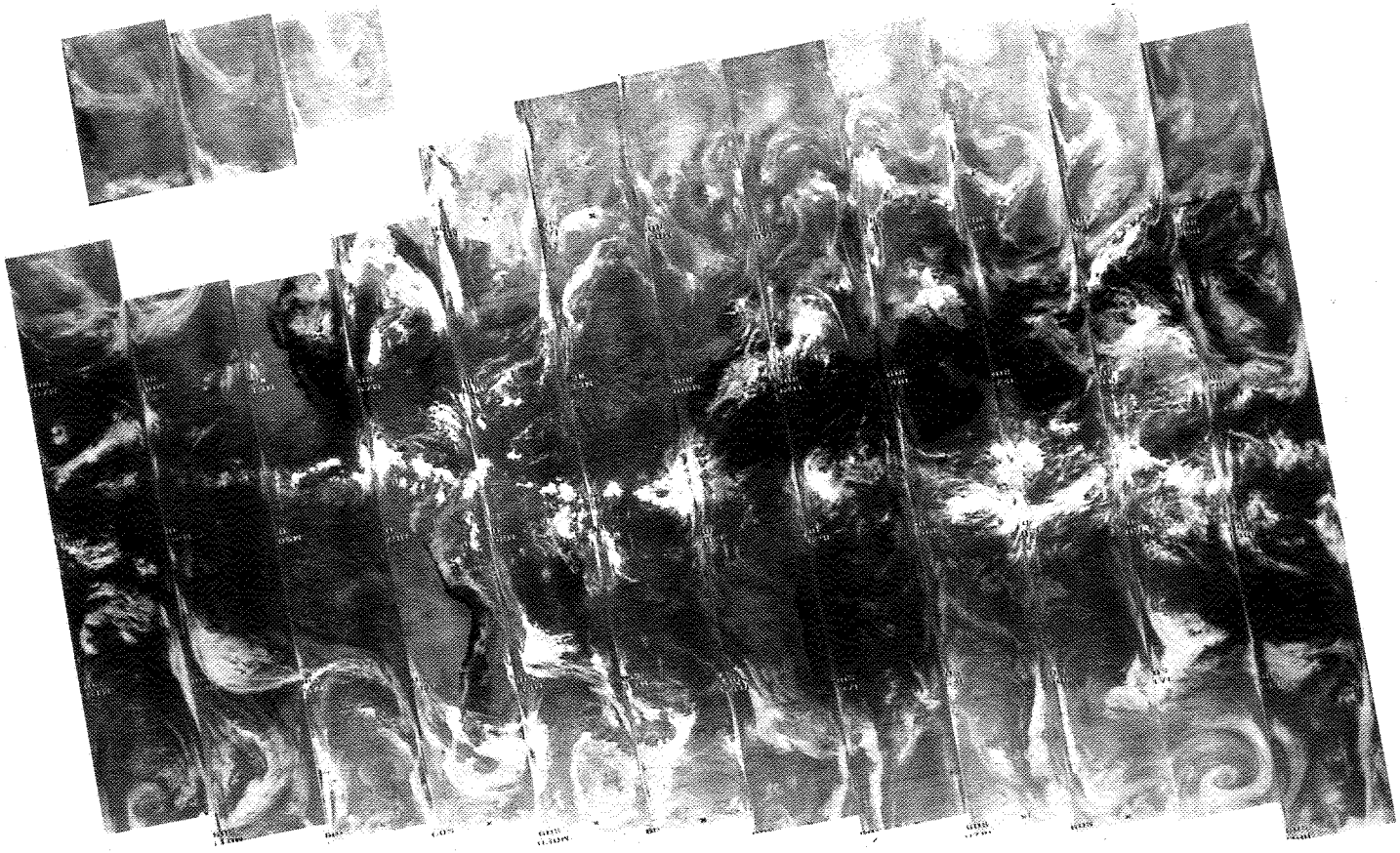


2331 2330 2329 2328 2327 2326 2325 2324 2323 2322 2321 2320 2319

2 JUNE 1973

6.7 μm

min.

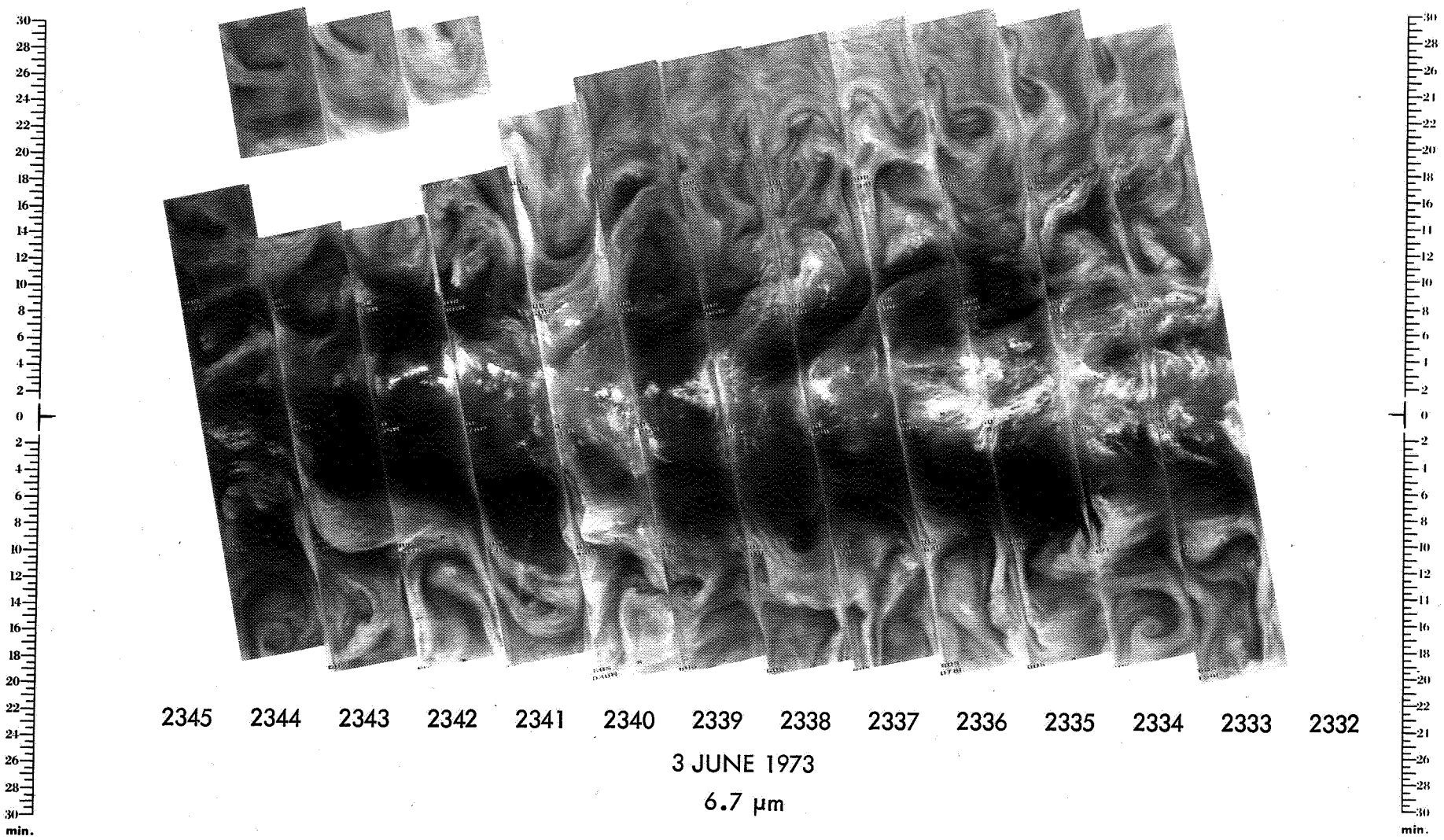


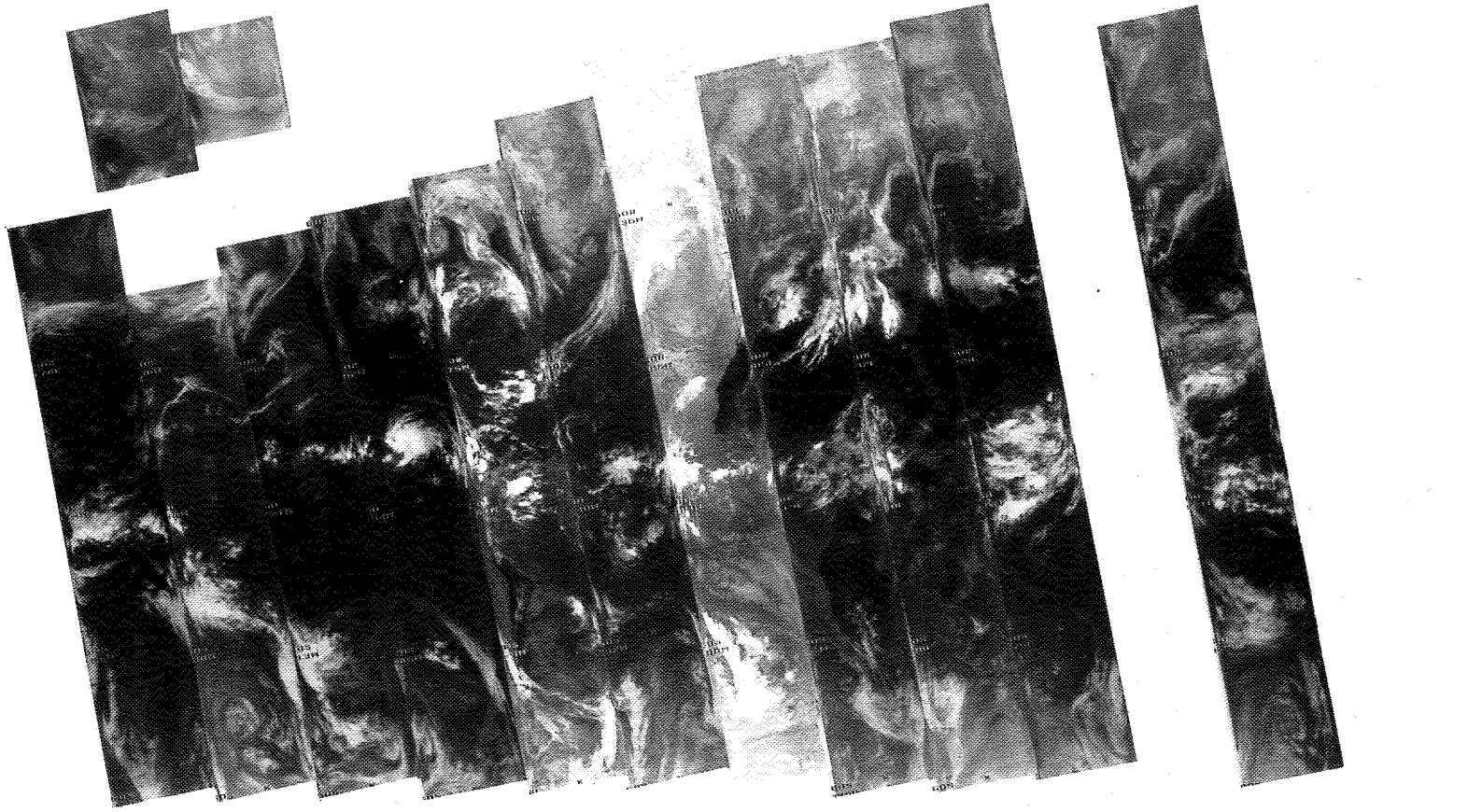
2345 2344 2343 2342 2341 2340 2339 2338 2337 2336 2335 2334 2333 2332

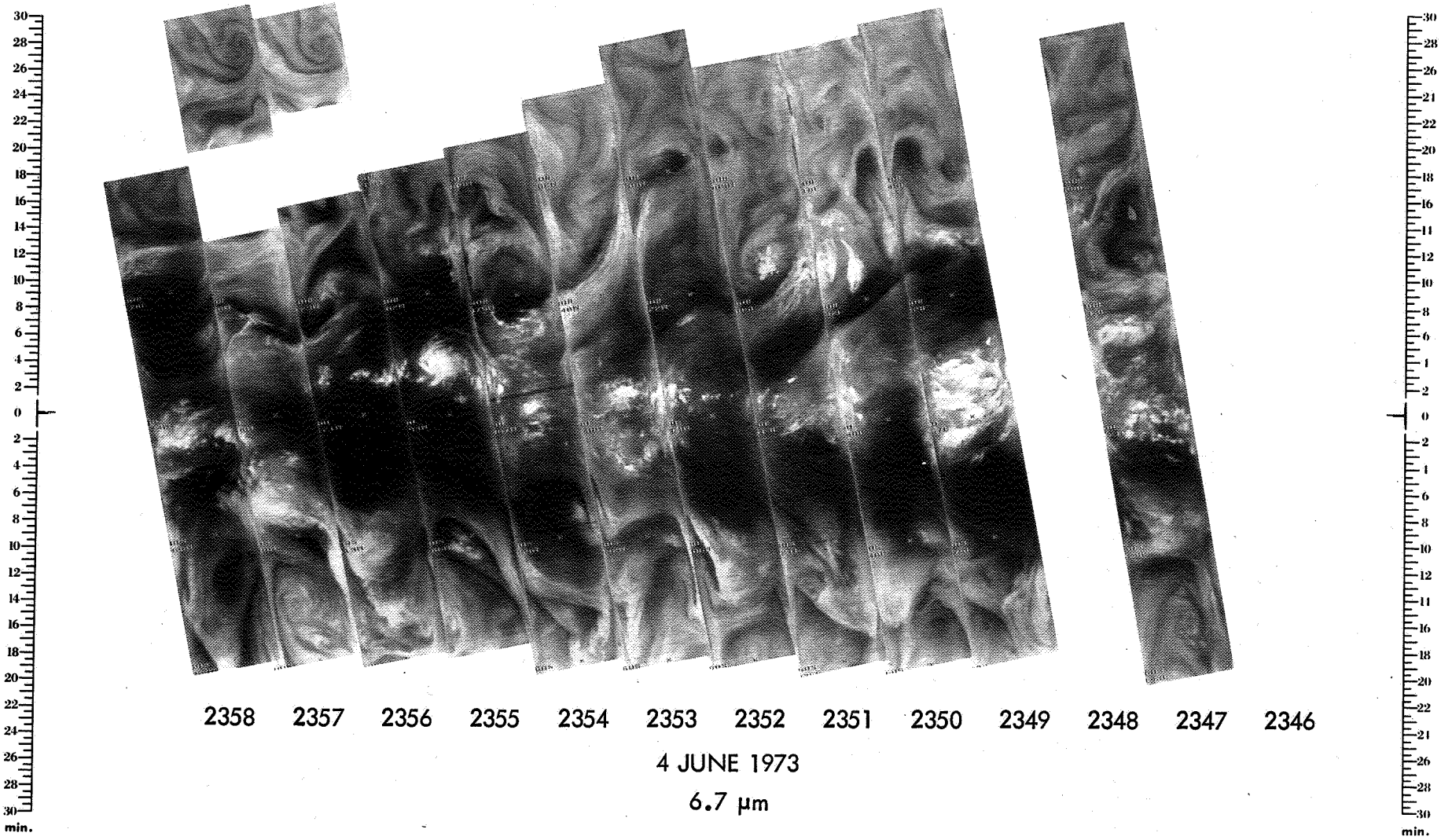
3 JUNE 1973

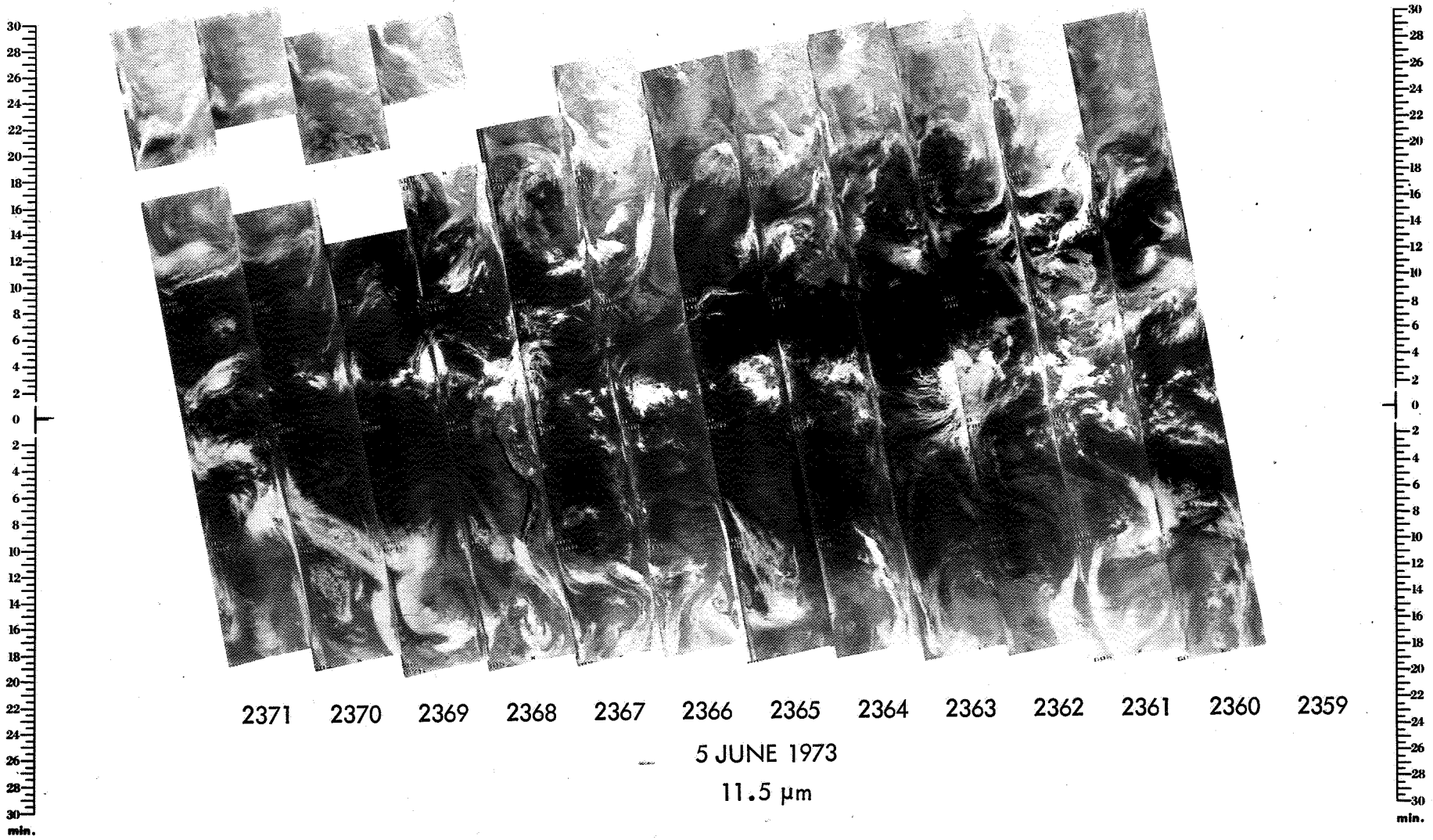
11.5 μm

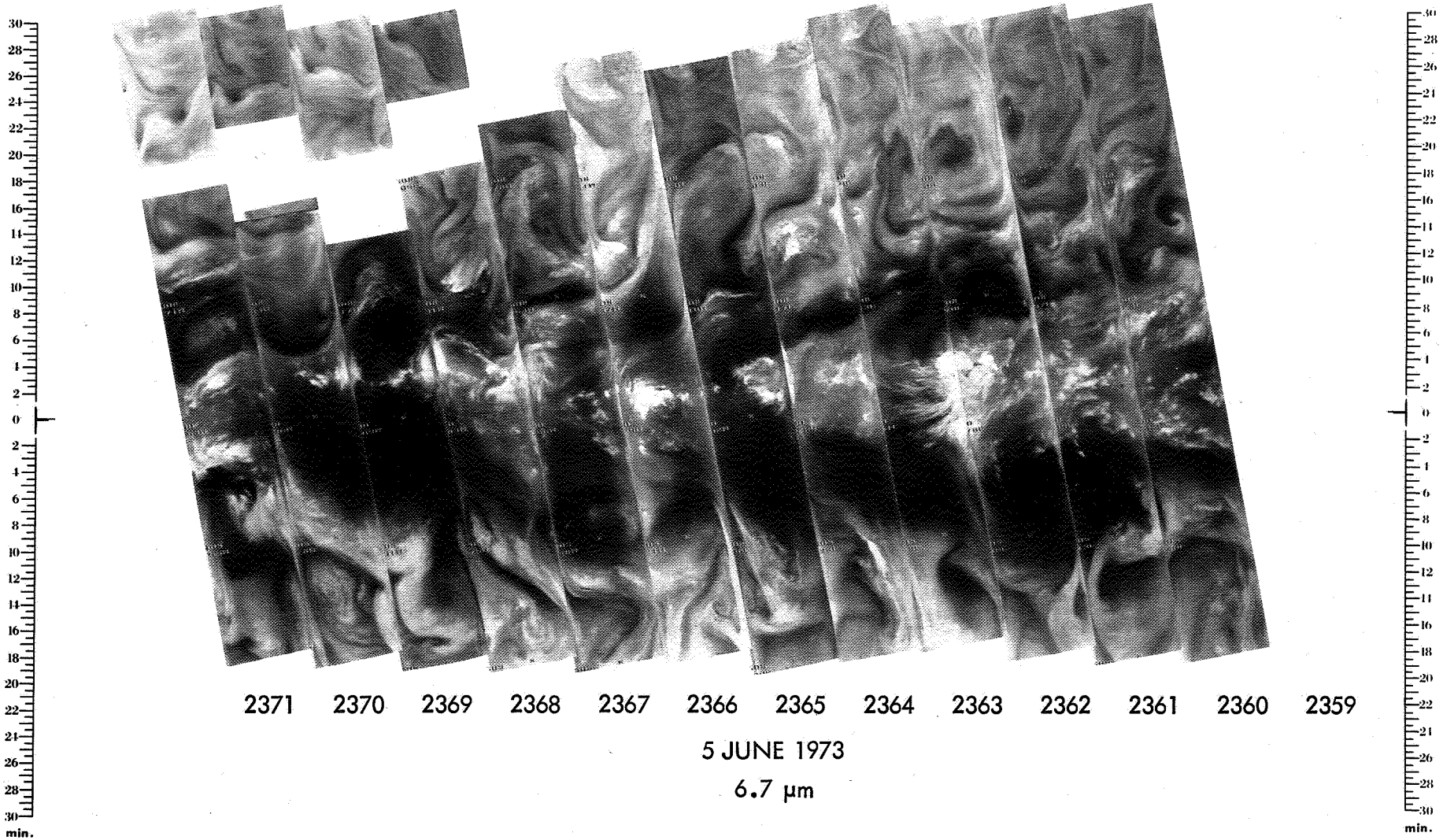
min.

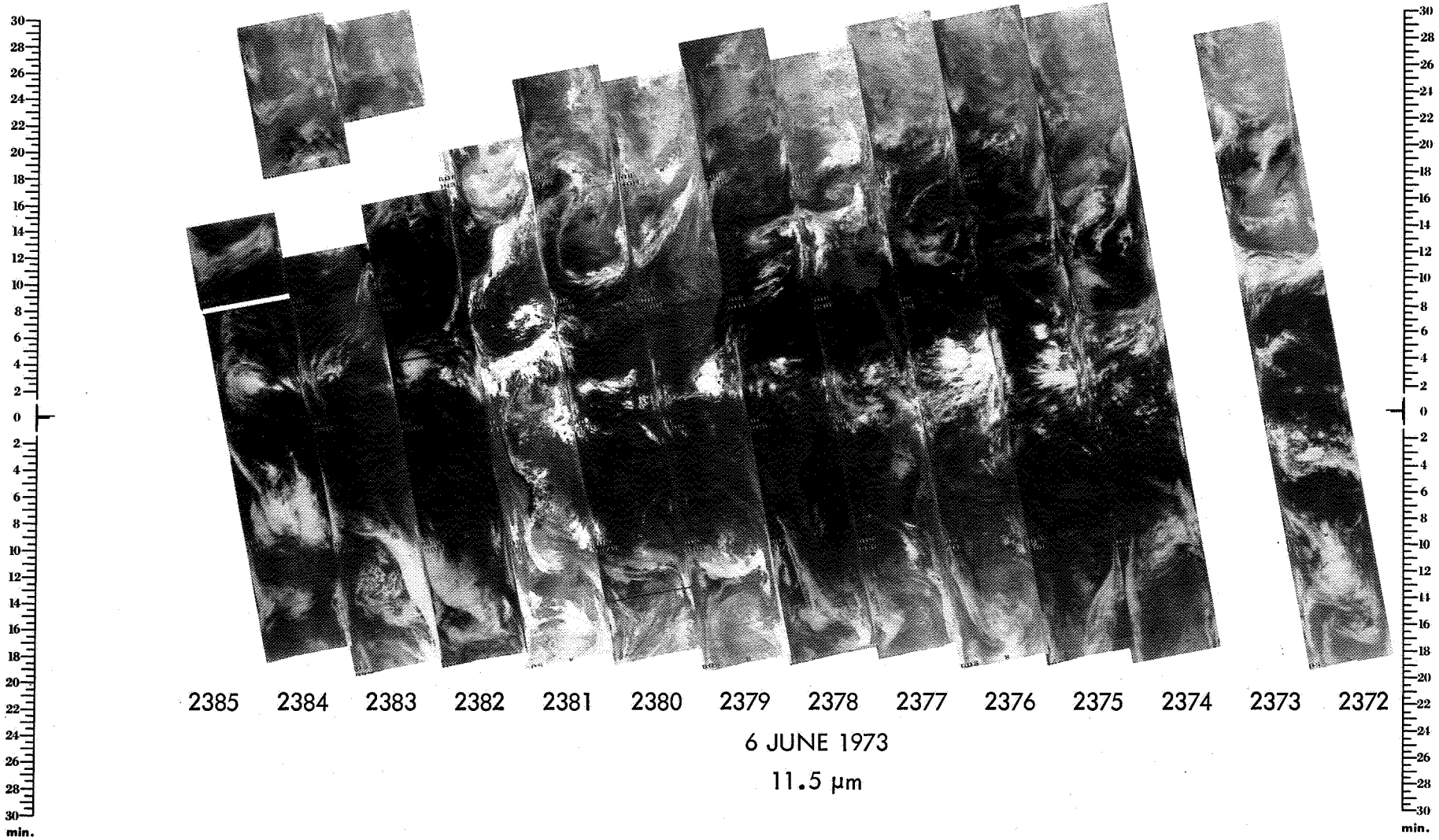

2345 2344 2343 2342 2341 2340 2339 2338 2337 2336 2335 2334 2333 2332
3 JUNE 1973
6.7 μm
min.
min.

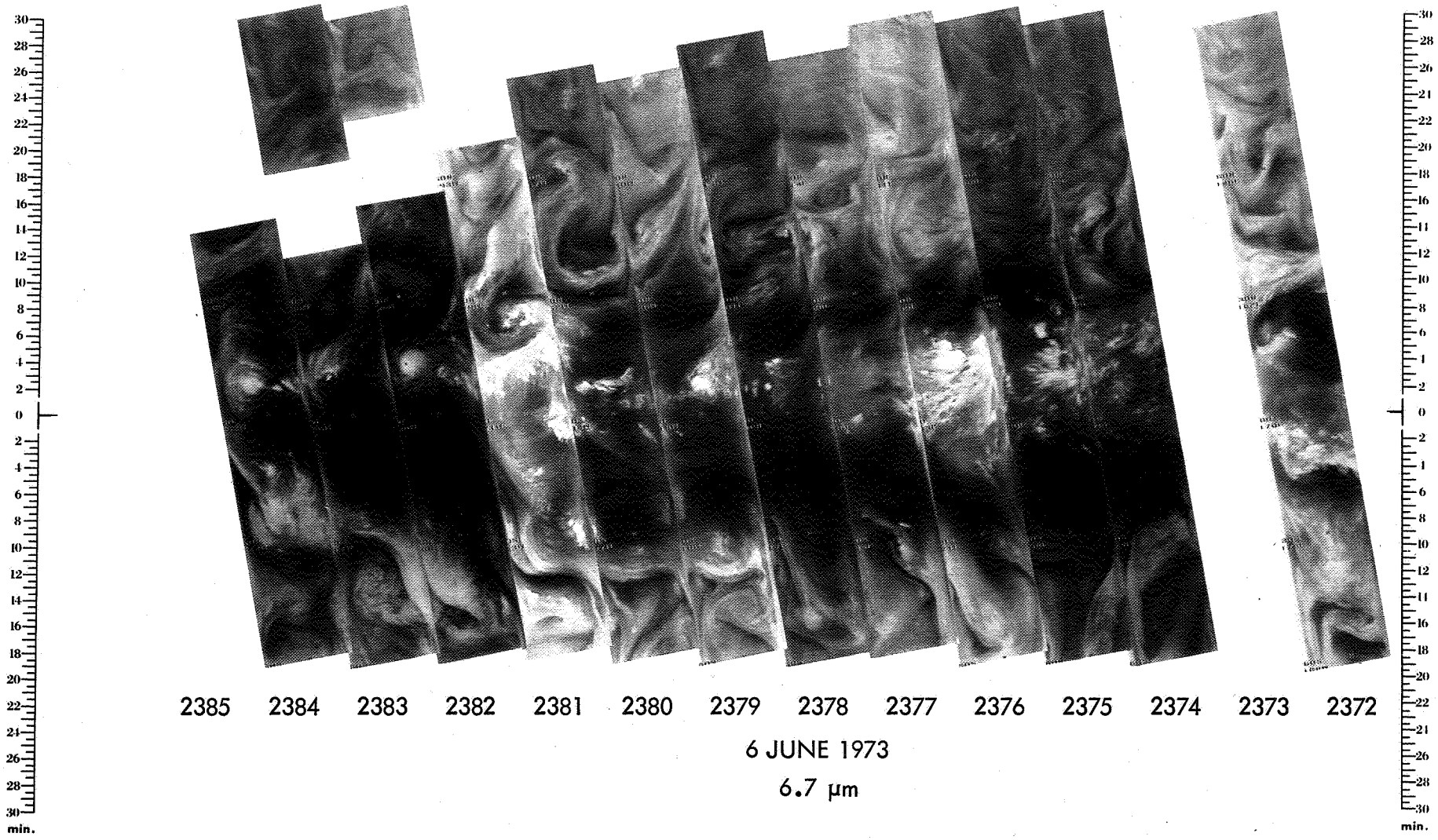

2358
2357
2356
2355
2354
2353
2352
2351
2350
2349
2348
2347
2346
4 JUNE 1973
11.5 μm
min.
min.

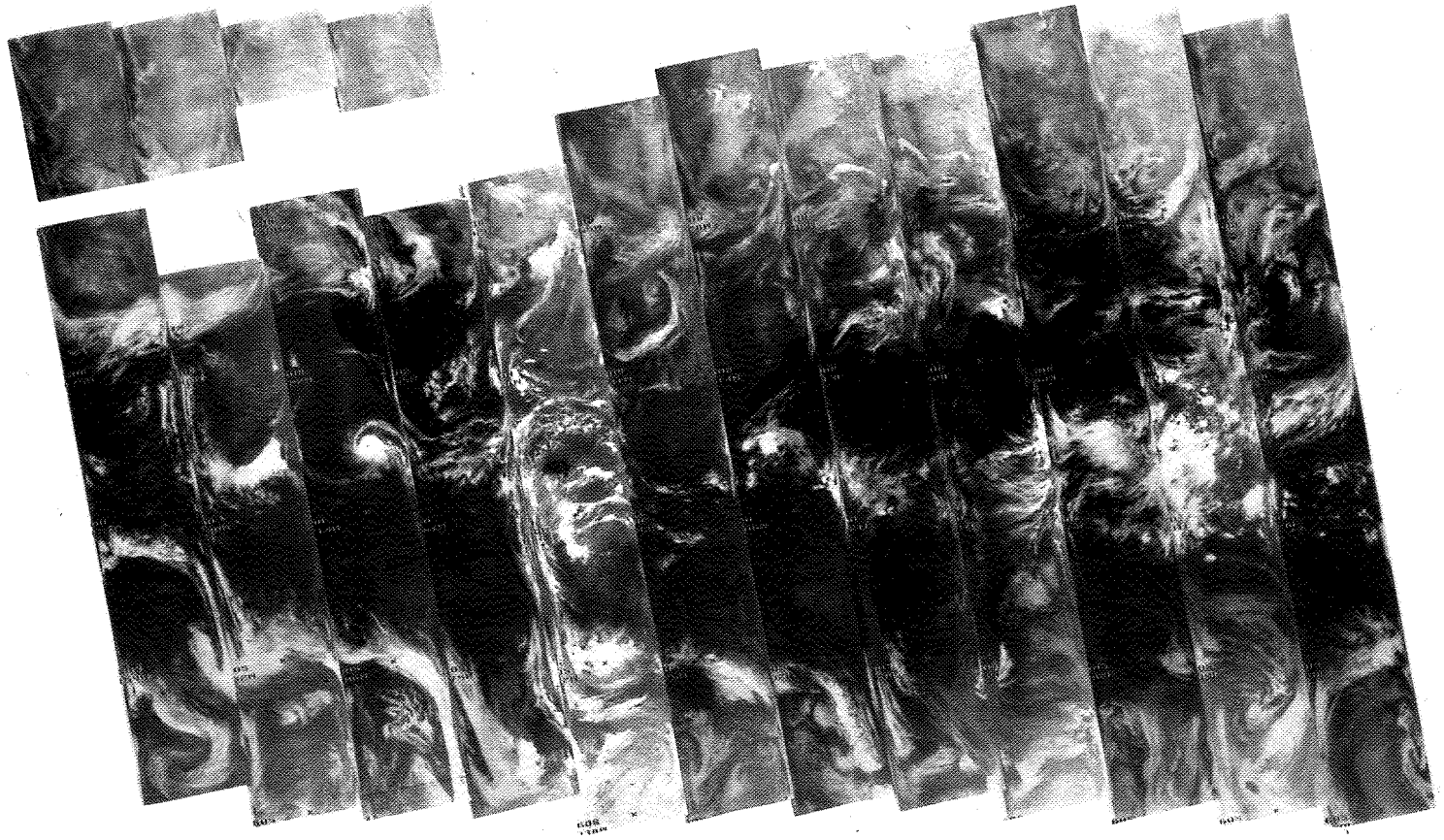

2358
2357
2356
2355
2354
2353
2352
2351
2350
2349
2348
2347
2346
4 JUNE 1973
6.7 μm
min.
min.


2371 2370 2369 2368 2367 2366 2365 2364 2363 2362 2361 2360 2359
5 JUNE 1973
11.5 μm
min.
min.


2371 2370 2369 2368 2367 2366 2365 2364 2363 2362 2361 2360 2359
5 JUNE 1973
6.7 μm
min.
min.


2385
2384
2383
2382
2381
2380
2379
2378
2377
2376
2375
2374
2373
2372
6 JUNE 1973
11.5 μm
min.
min.


2385
2384
2383
2382
2381
2380
2379
2378
2377
2376
2375
2374
2373
2372
6 JUNE 1973
6.7 μm
min.
min.

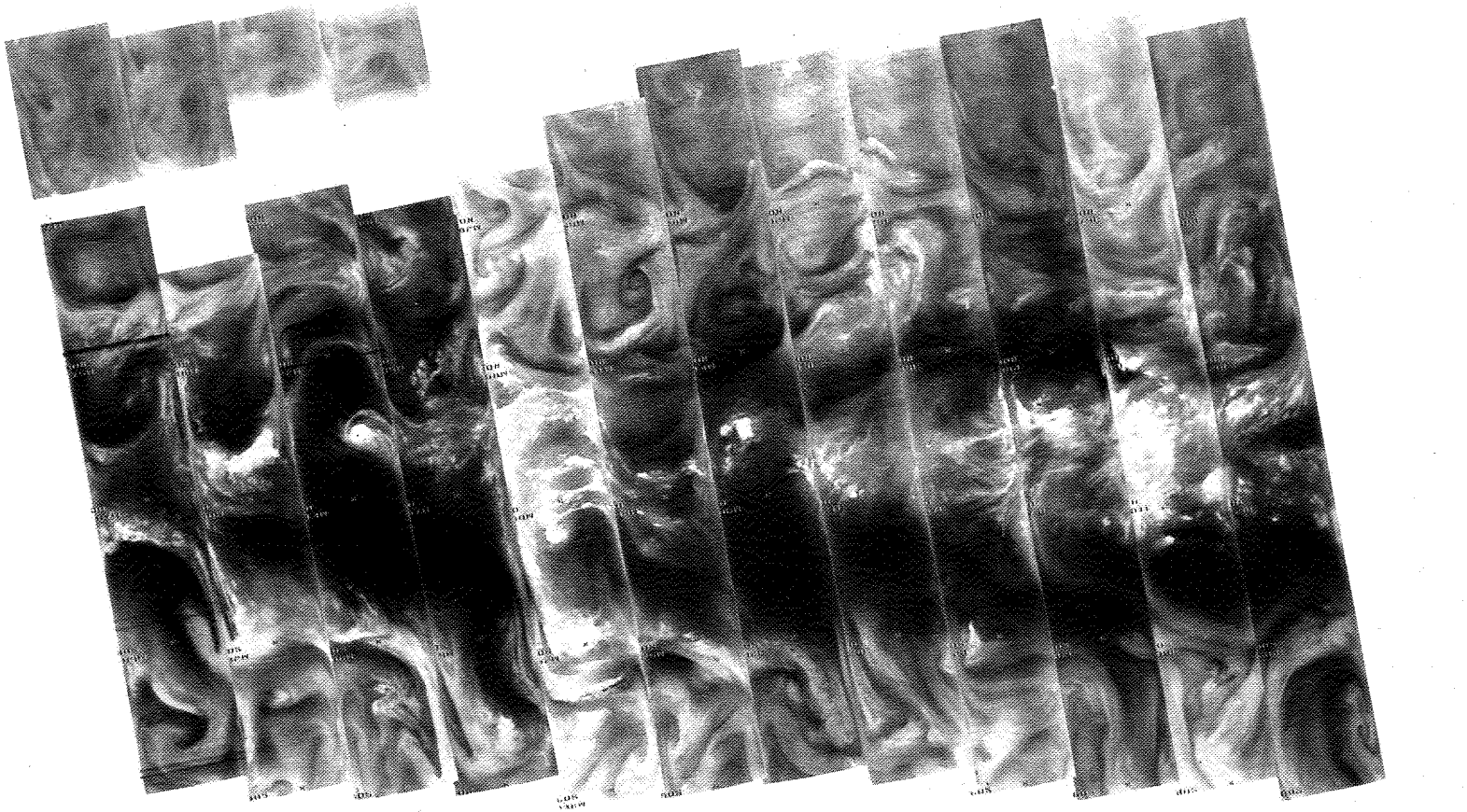


2398 2397 2396 2395 2394 2393 2392 2391 2390 2389 2388 2387 2386

7 JUNE 1973

11.5 μm

min.

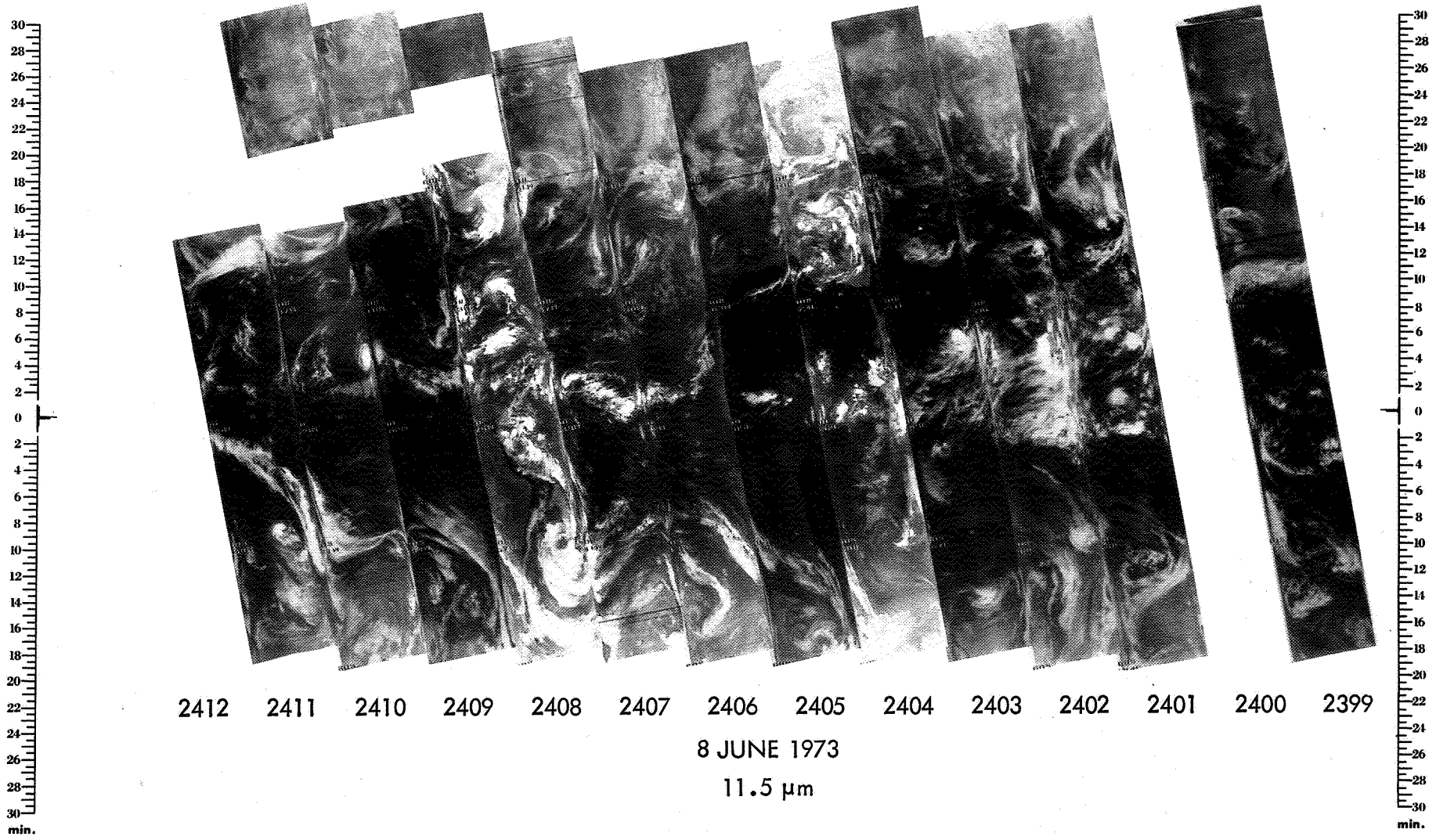


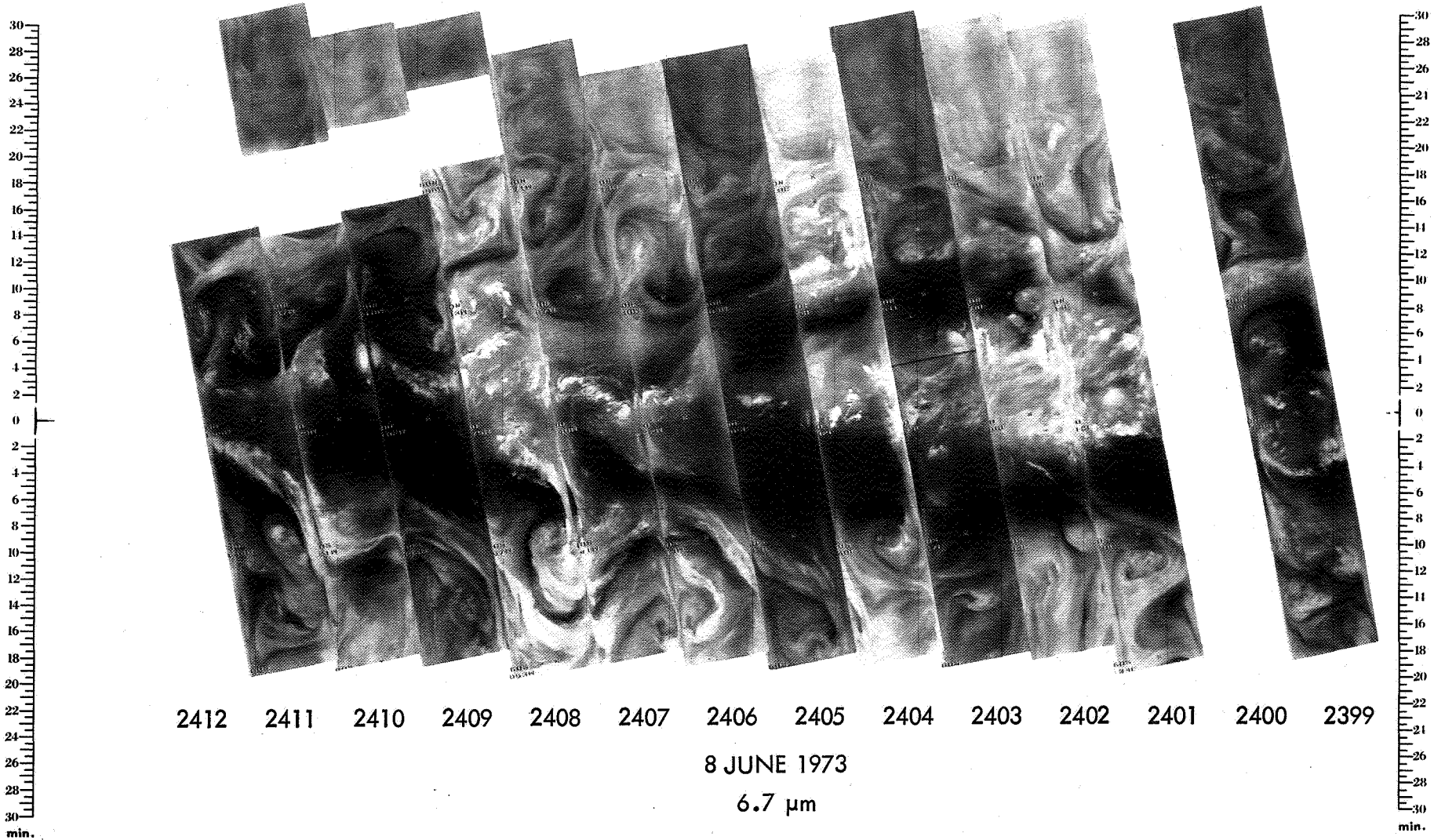
2398 2397 2396 2395 2394 2393 2392 2391 2390 2389 2388 2387 2386

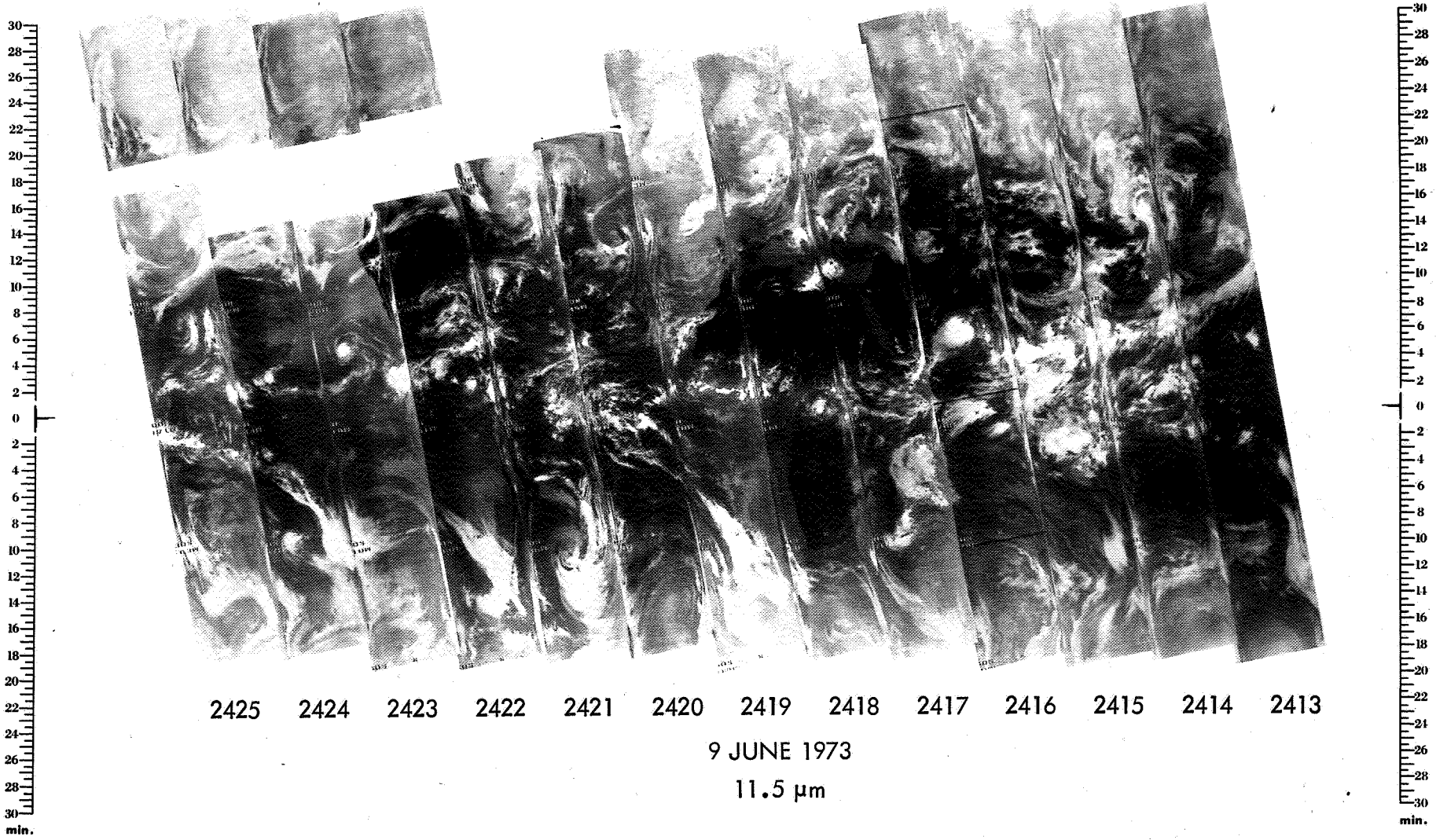
7 JUNE 1973

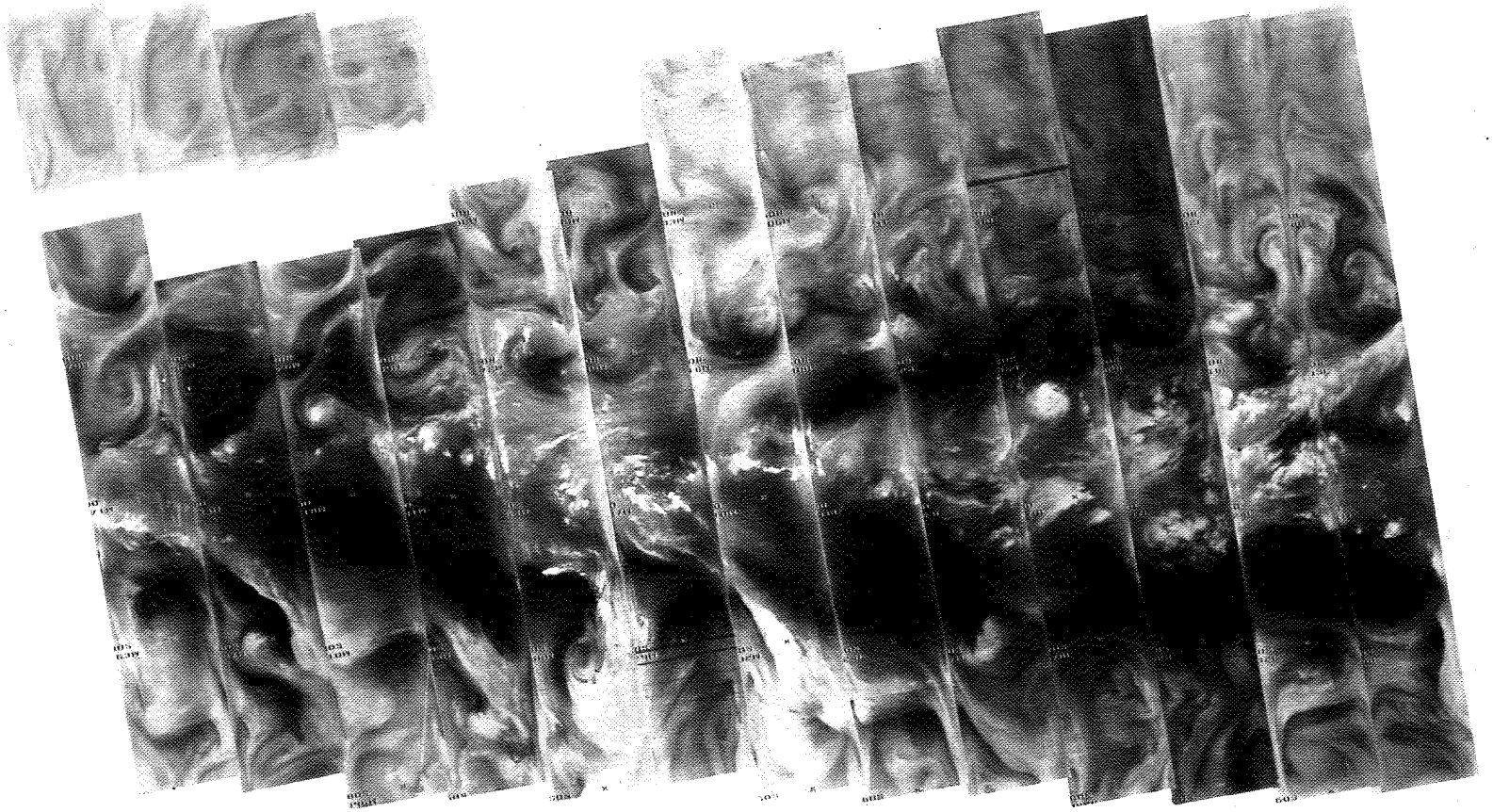
6.7 μm

min.


2412 2411 2410 2409 2408 2407 2406 2405 2404 2403 2402 2401 2400 2399
8 JUNE 1973
11.5 μm
min.
min.


2412 2411 2410 2409 2408 2407 2406 2405 2404 2403 2402 2401 2400 2399
8 JUNE 1973
6.7 μm
min.
min.

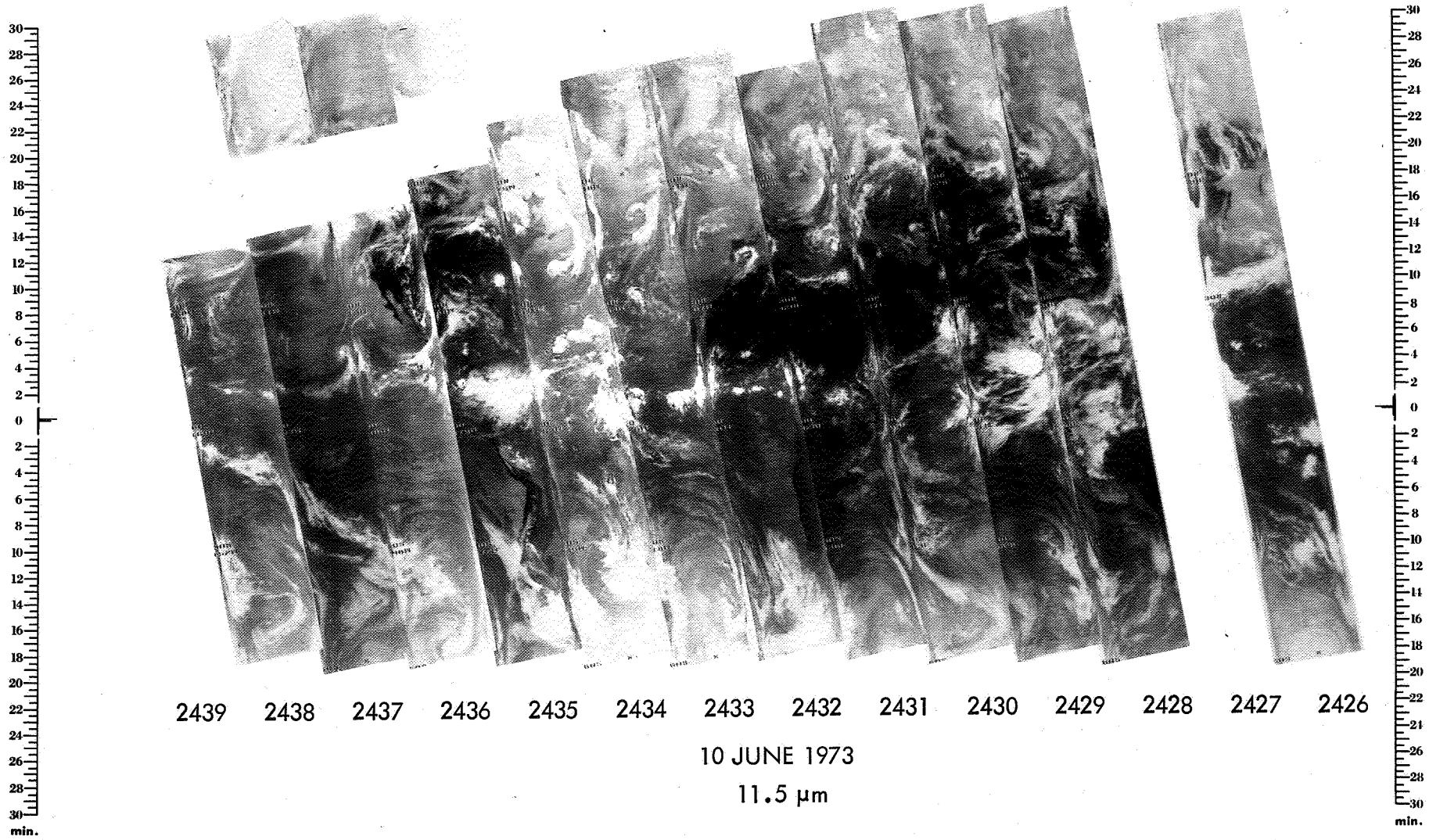

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2425 2424 2423 2422 2421 2420 2419 2418 2417 2416 2415 2414 2413
9 JUNE 1973
11.5 μm

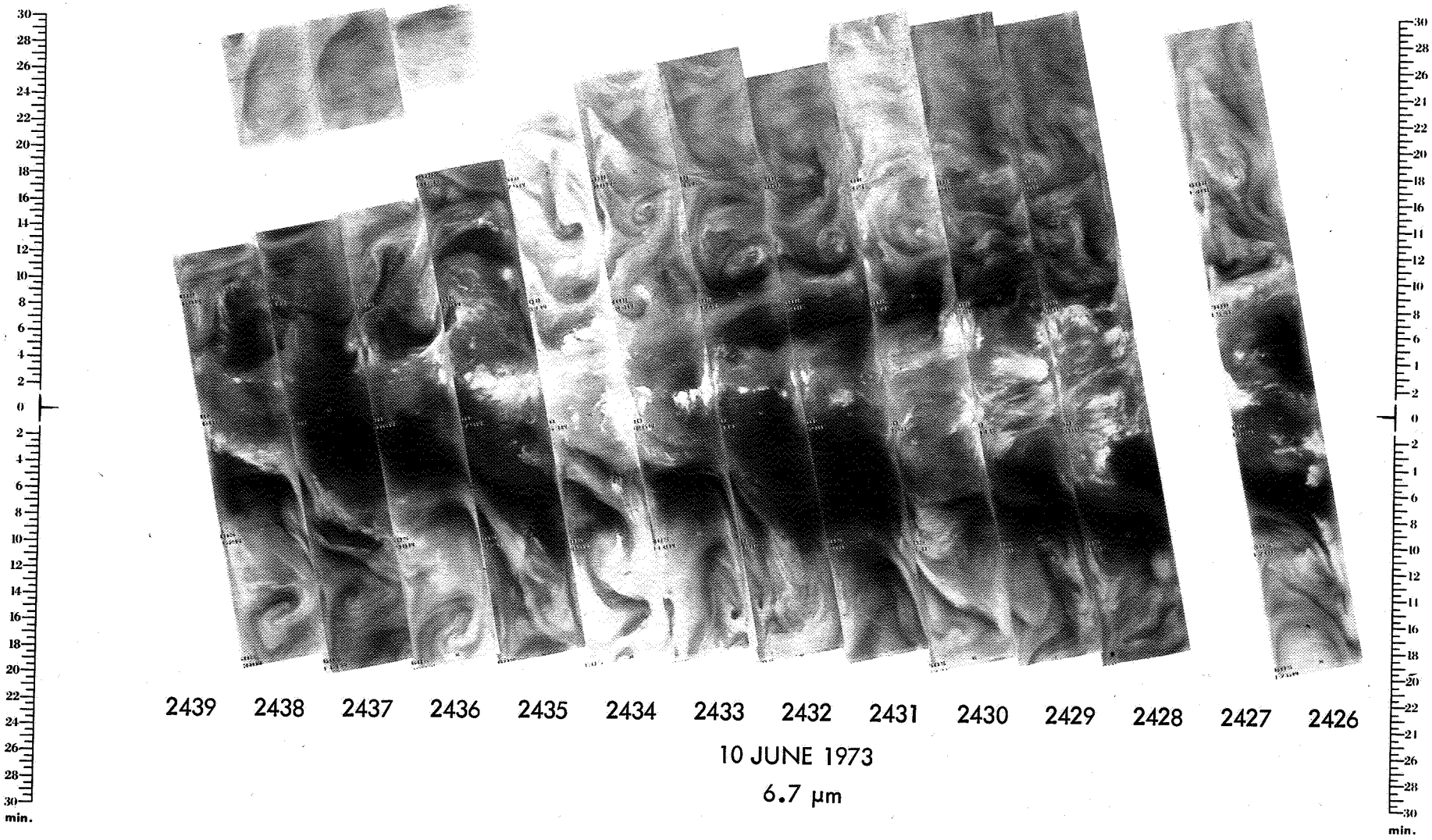


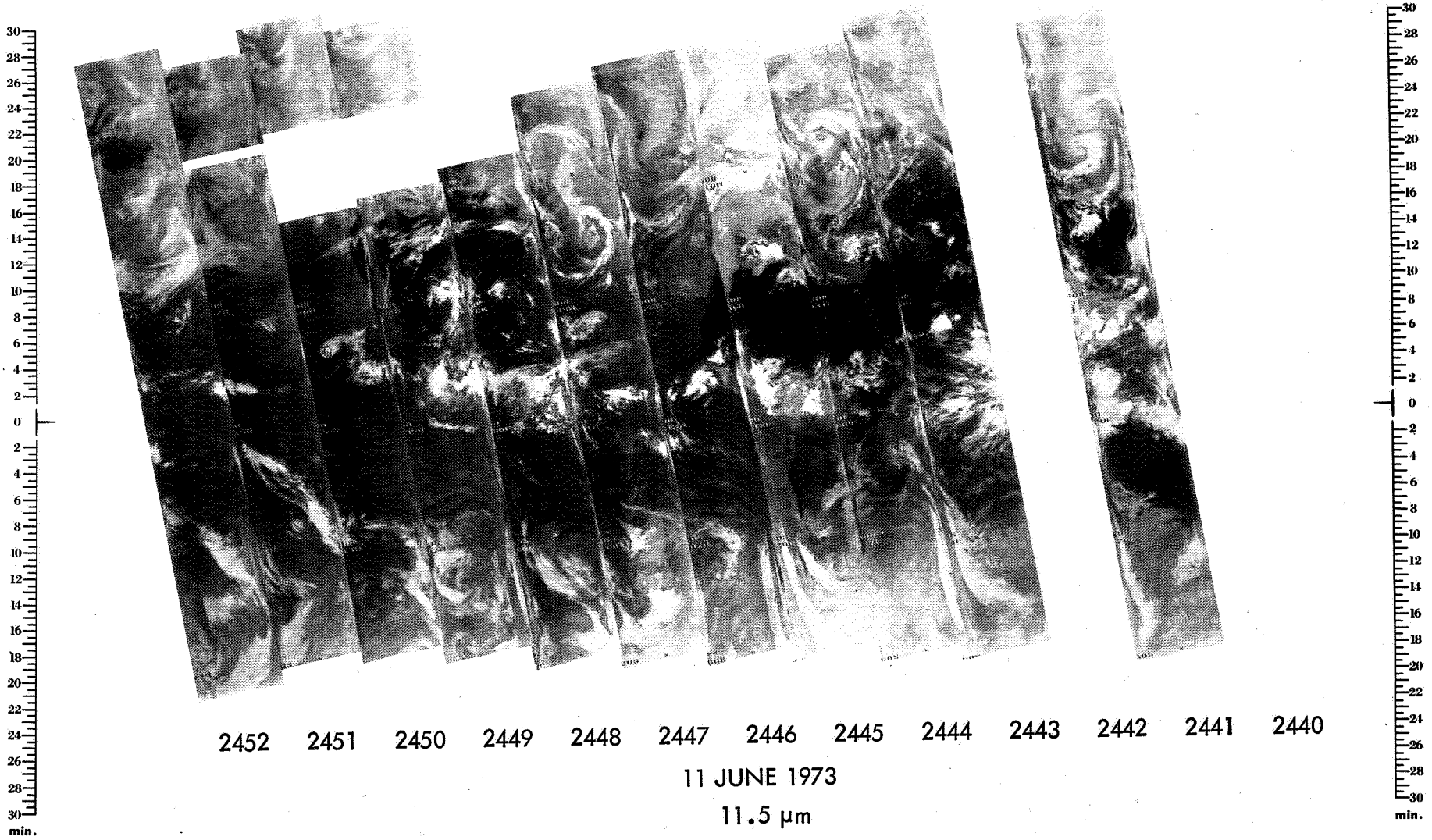
2425 2424 2423 2422 2421 2420 2419 2418 2417 2416 2415 2414 2413

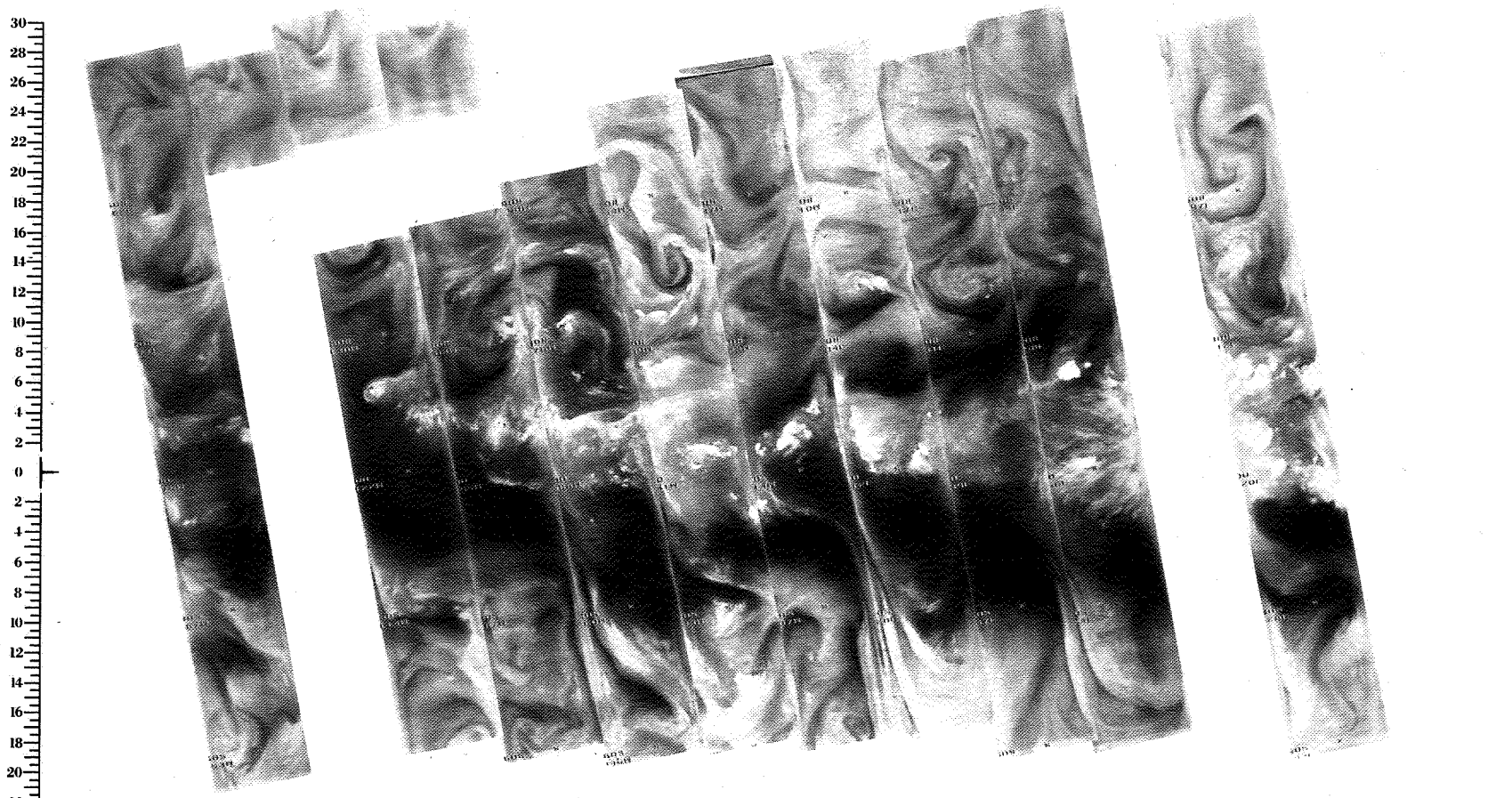
9 JUNE 1973

6.7 μm


2439 2438 2437 2436 2435 2434 2433 2432 2431 2430 2429 2428 2427 2426
10 JUNE 1973
11.5 μm
min.
min.


2439
2438
2437
2436
2435
2434
2433
2432
2431
2430
2429
2428
2427
2426
10 JUNE 1973
6.7 μm
min.
min.


2452 2451 2450 2449 2448 2447 2446 2445 2444 2443 2442 2441 2440
11 JUNE 1973
11.5 μm
min.
min.

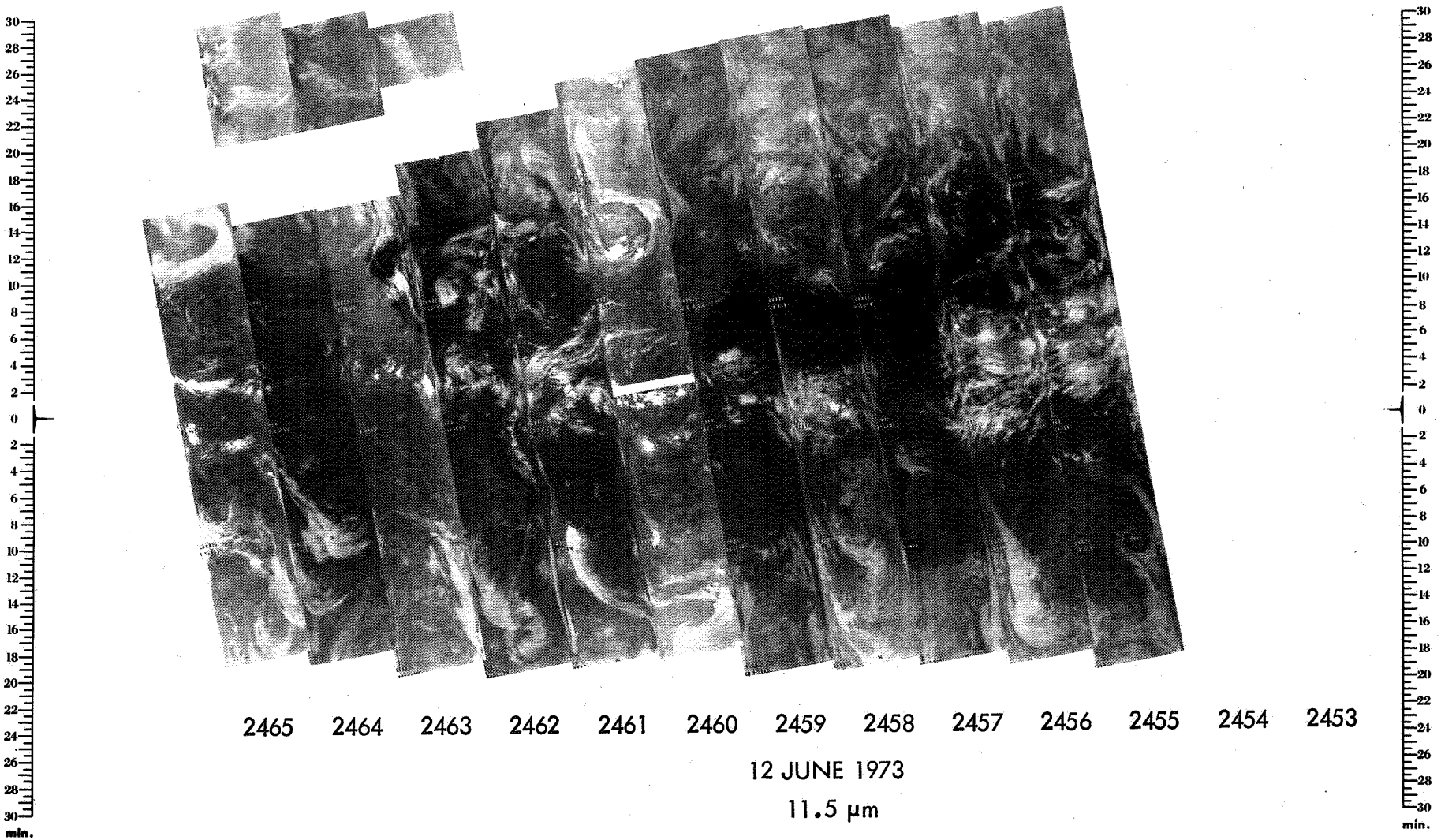


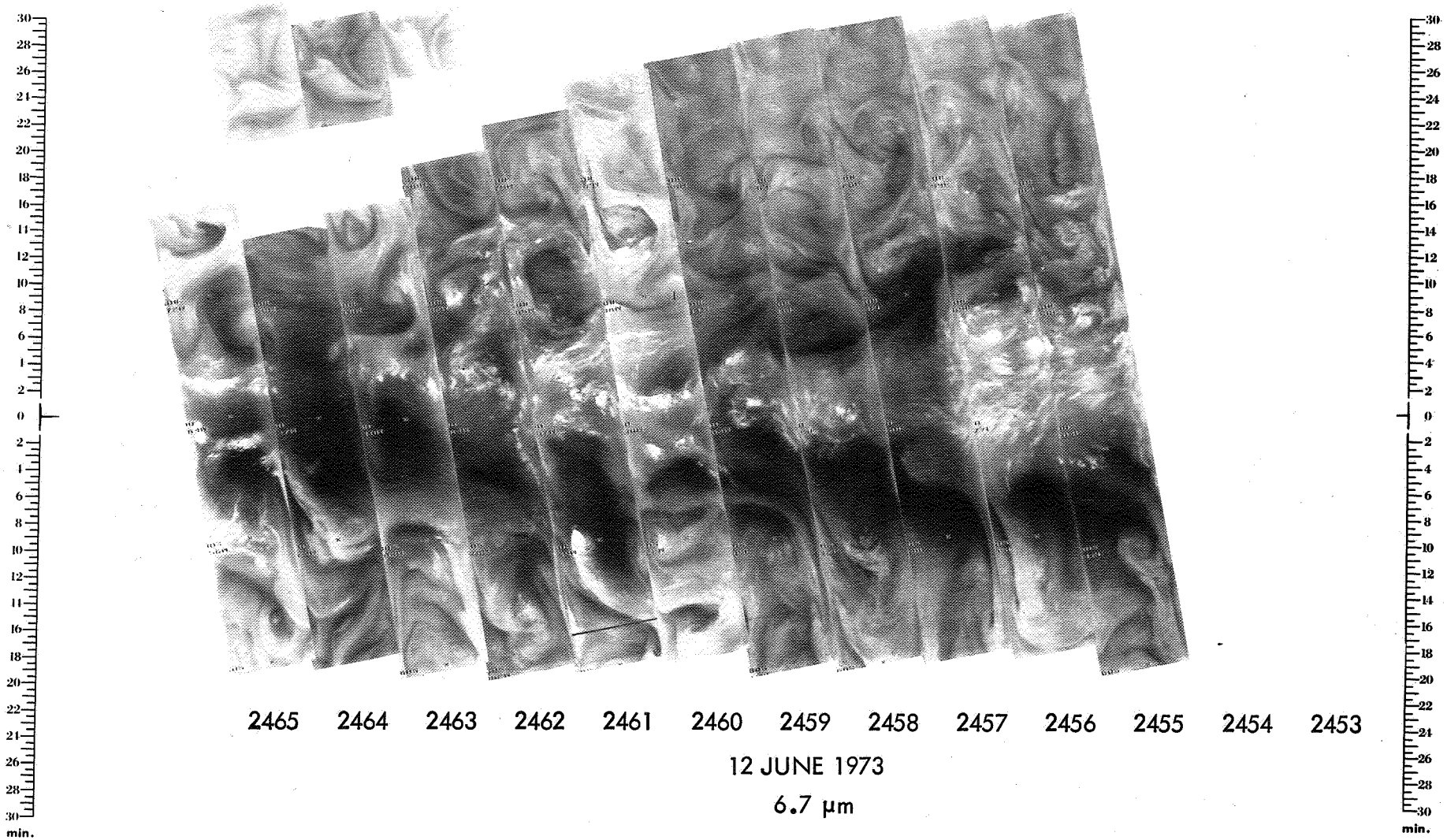
2452 2451 2450 2449 2448 2447 2446 2445 2444 2443 2442 2441 2440

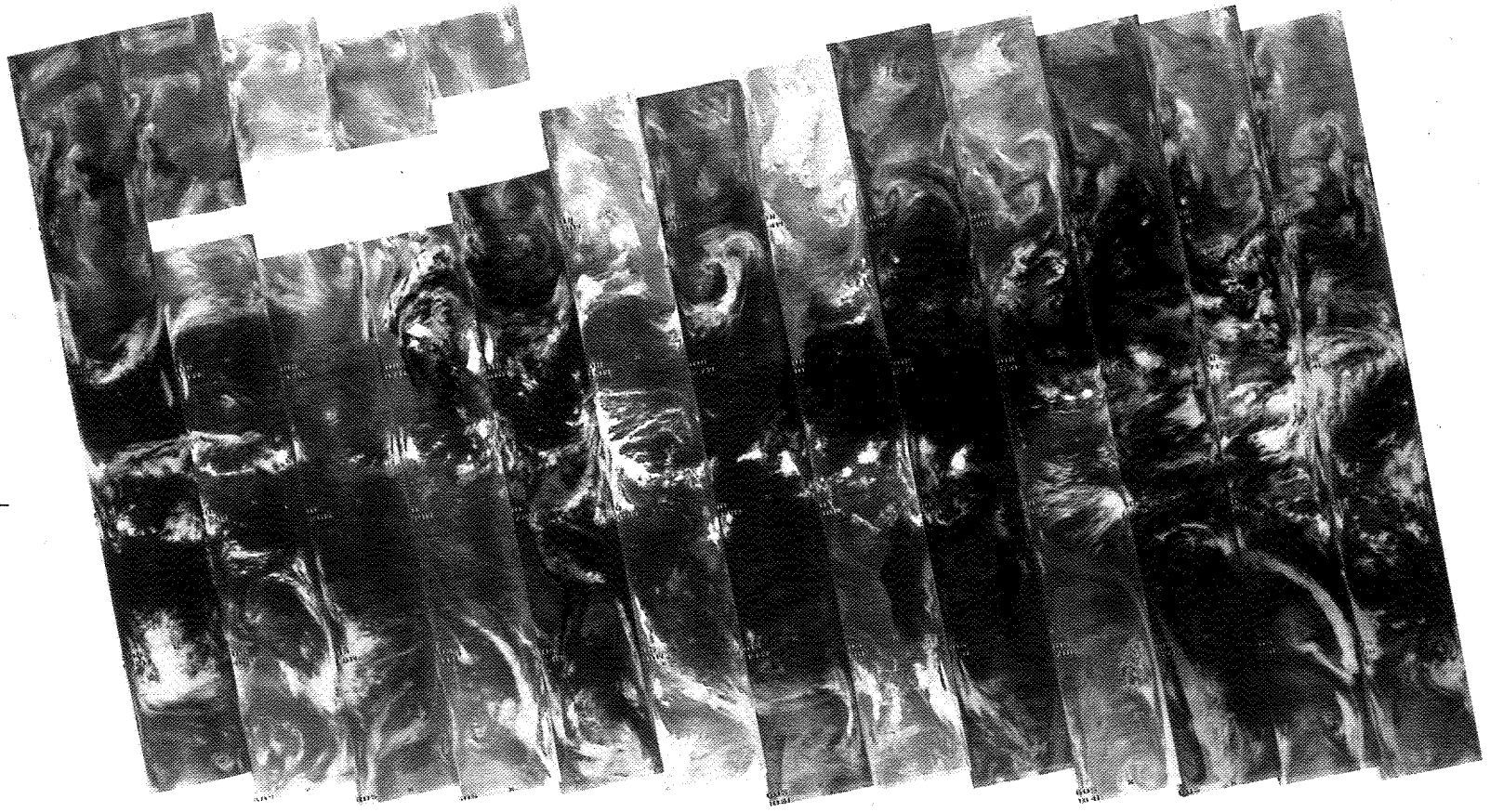
11 JUNE 1973

6.7 μm

min.


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2465 2464 2463 2462 2461 2460 2459 2458 2457 2456 2455 2454 2453
12 JUNE 1973
11.5 μm


2465 2464 2463 2462 2461 2460 2459 2458 2457 2456 2455 2454 2453
12 JUNE 1973
6.7 μm
min.
min.

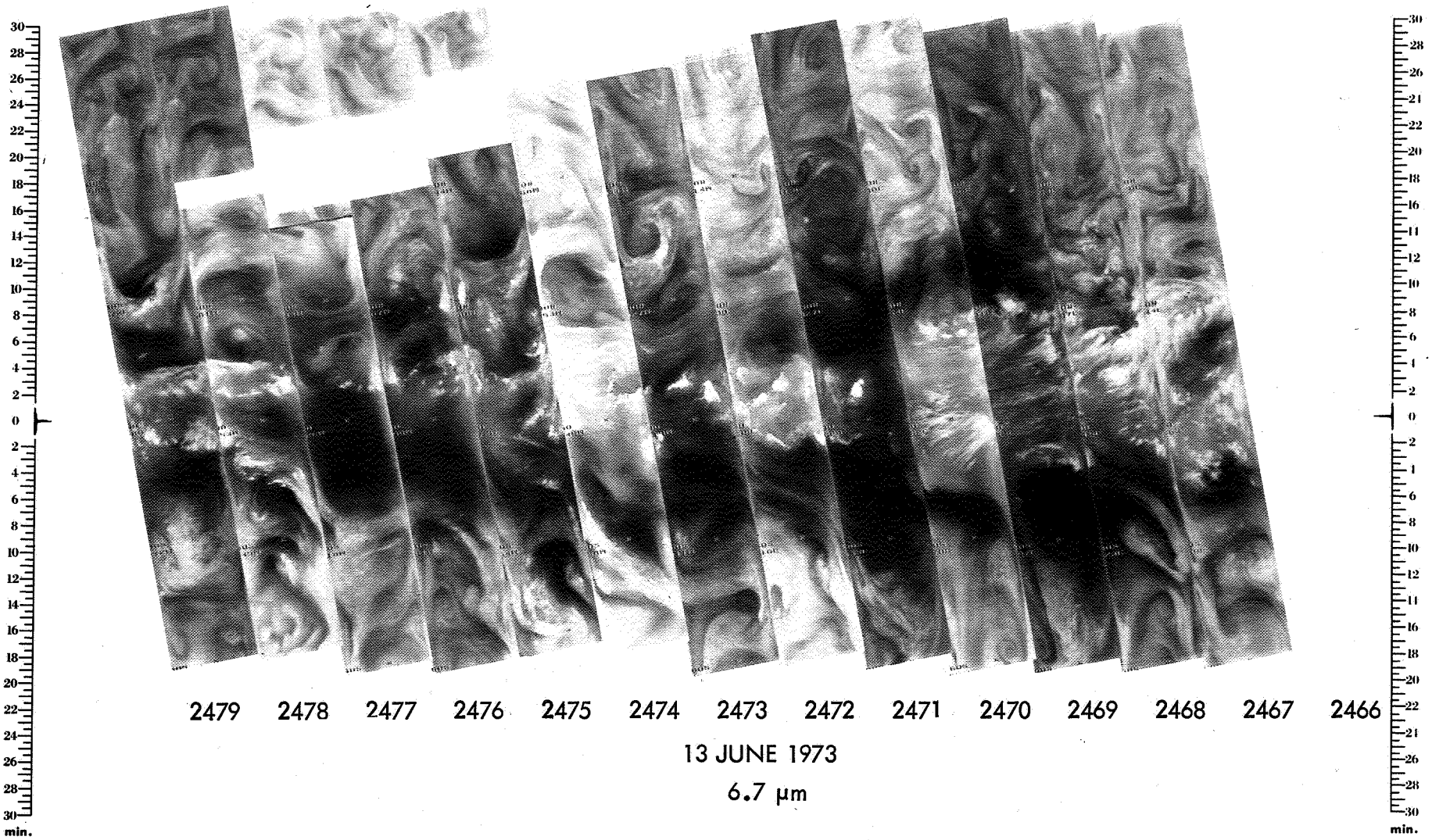


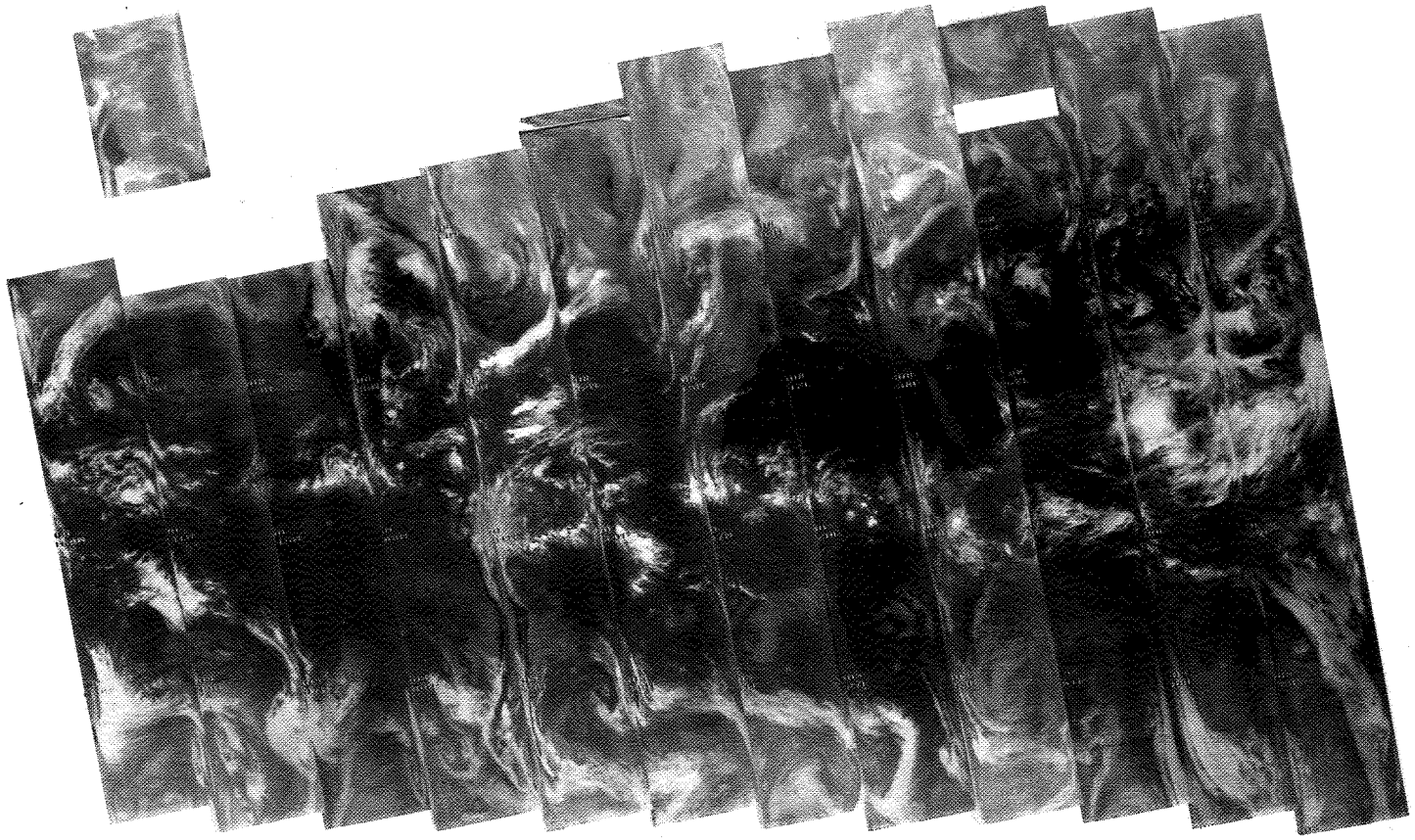
2479 2478 2477 2476 2475 2474 2473 2472 2471 2470 2469 2468 2467 2466

13 JUNE 1973

11.5 μm

min.

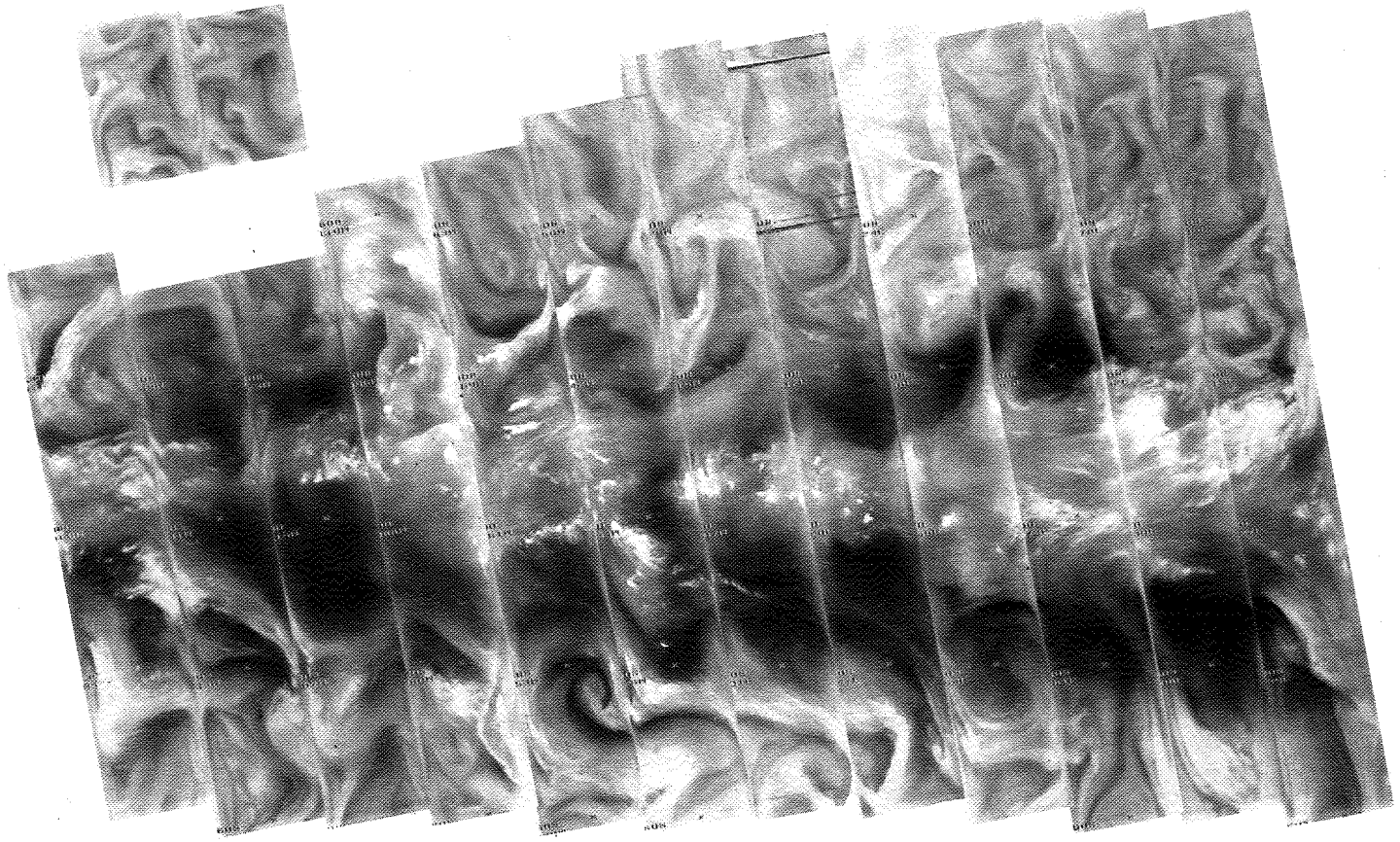

2479 2478 2477 2476 2475 2474 2473 2472 2471 2470 2469 2468 2467 2466
13 JUNE 1973
6.7 μm
min.
min.



2492 2491 2490 2489 2488 2487 2486 2485 2484 2483 2482 2481 2480

14 JUNE 1973

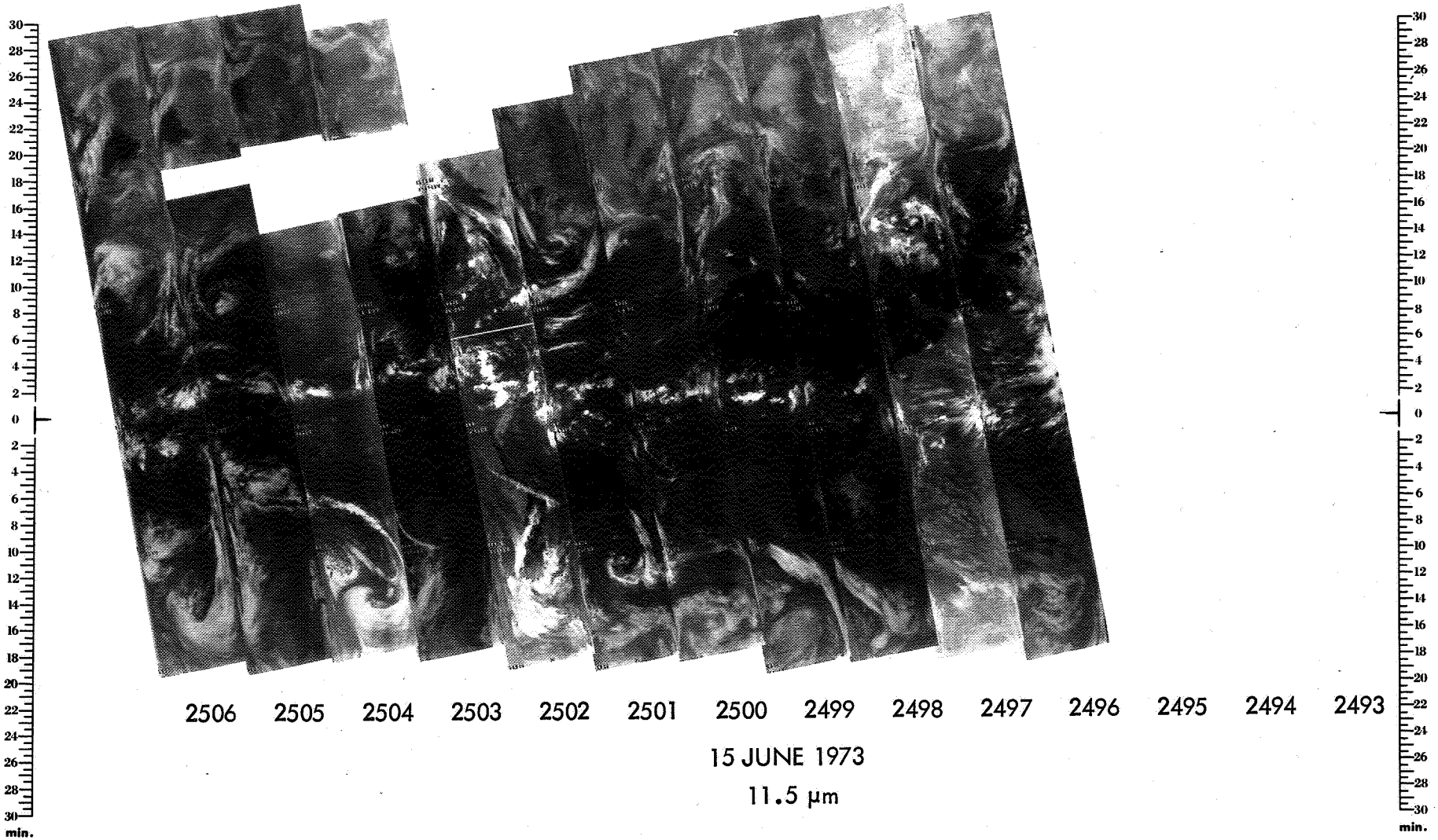
11.5 μm

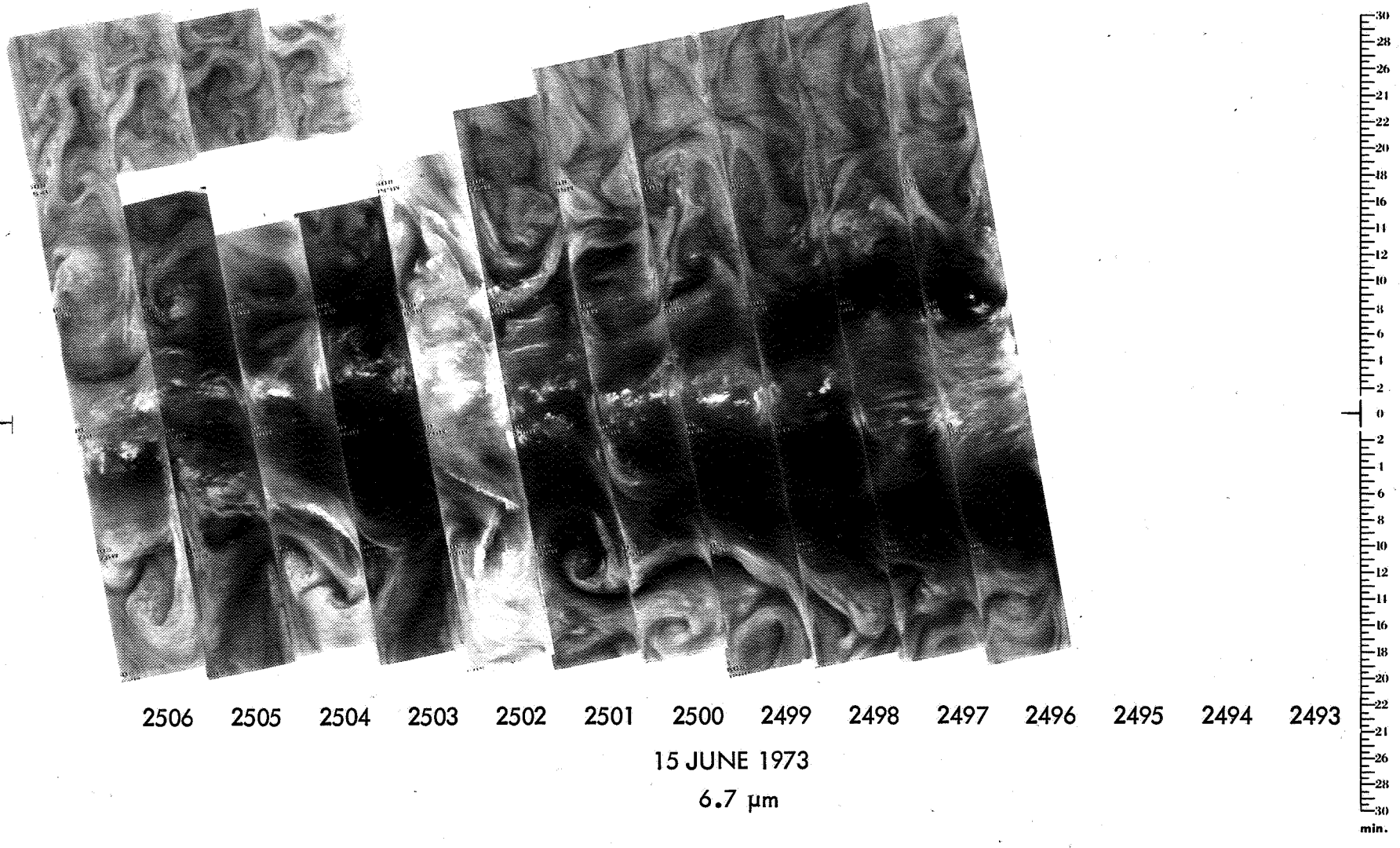


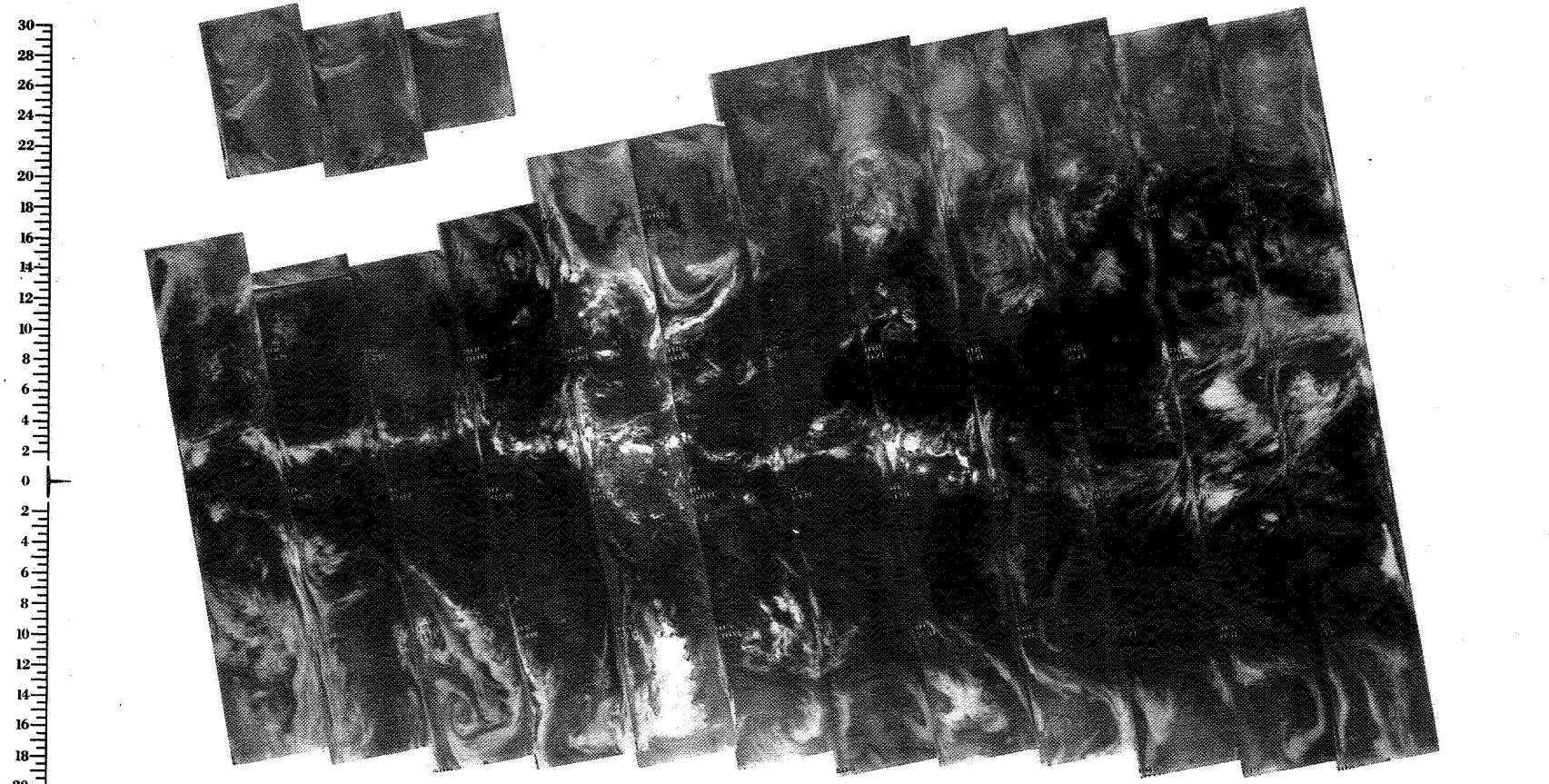
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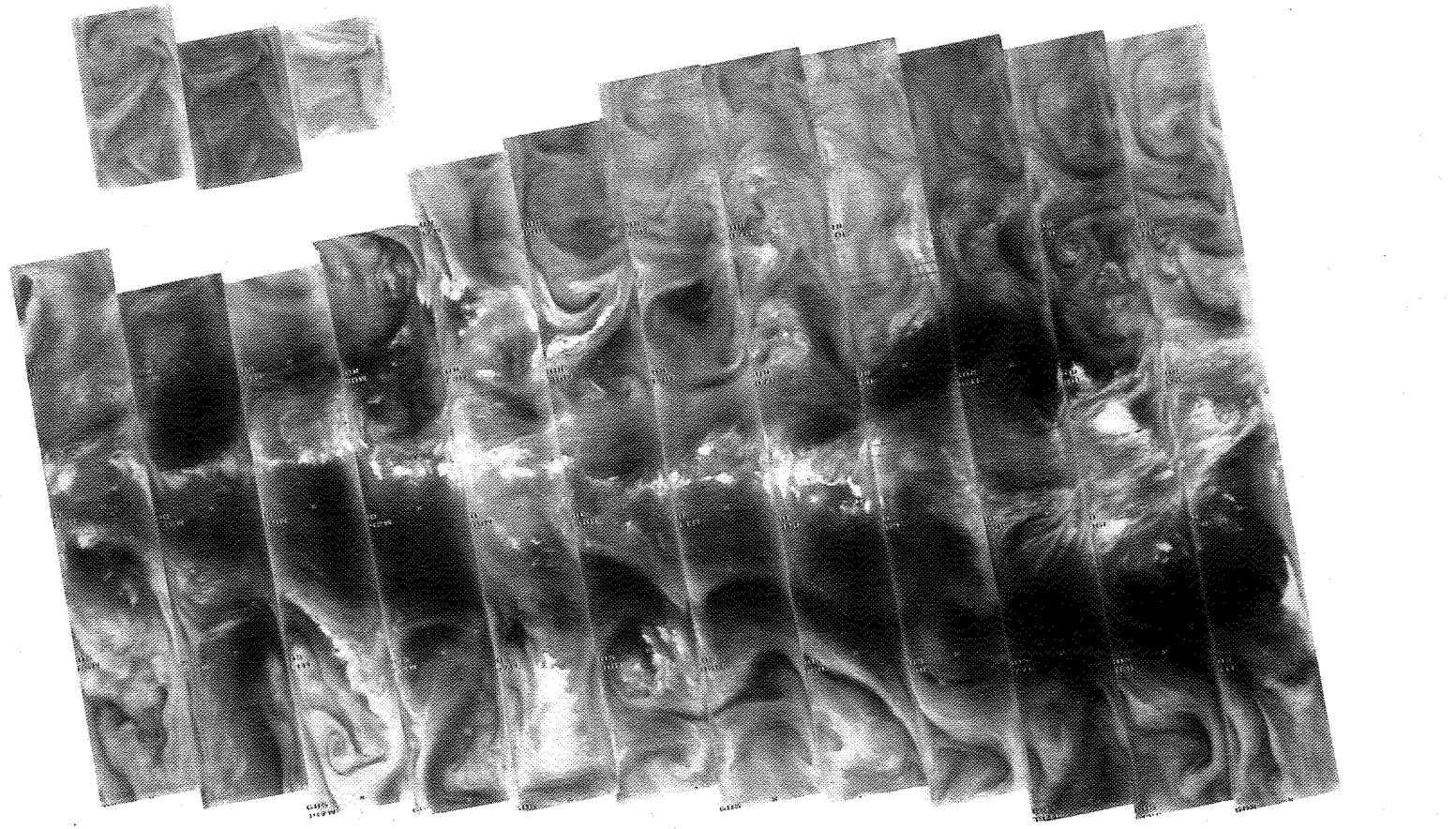
14 JUNE 1973

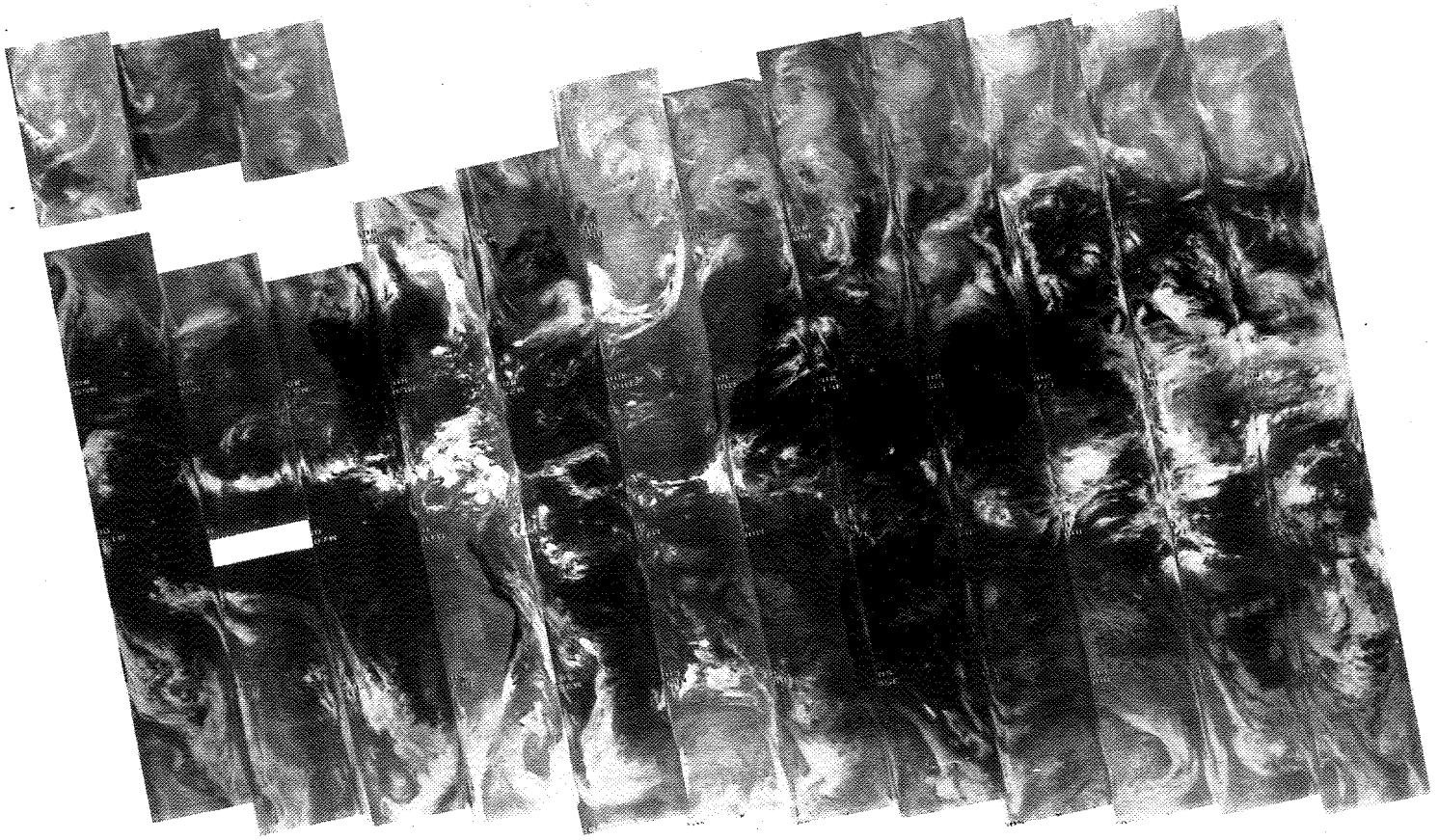
6.7 μm


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2506 2505 2504 2503 2502 2501 2500 2499 2498 2497 2496 2495 2494 2493
15 JUNE 1973
11.5 μm
30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.


2506 2505 2504 2503 2502 2501 2500 2499 2498 2497 2496 2495 2494 2493
15 JUNE 1973
6.7 μm
min.
min.


2519 2518 2517 2516 2515 2514 2513 2512 2511 2510 2509 2508 2507
16 JUNE 1973
11.5 μm
min.
min.


2519 2518 2517 2516 2515 2514 2513 2512 2511 2510 2509 2508 2507
16 JUNE 1973
6.7 μm
min.
min.

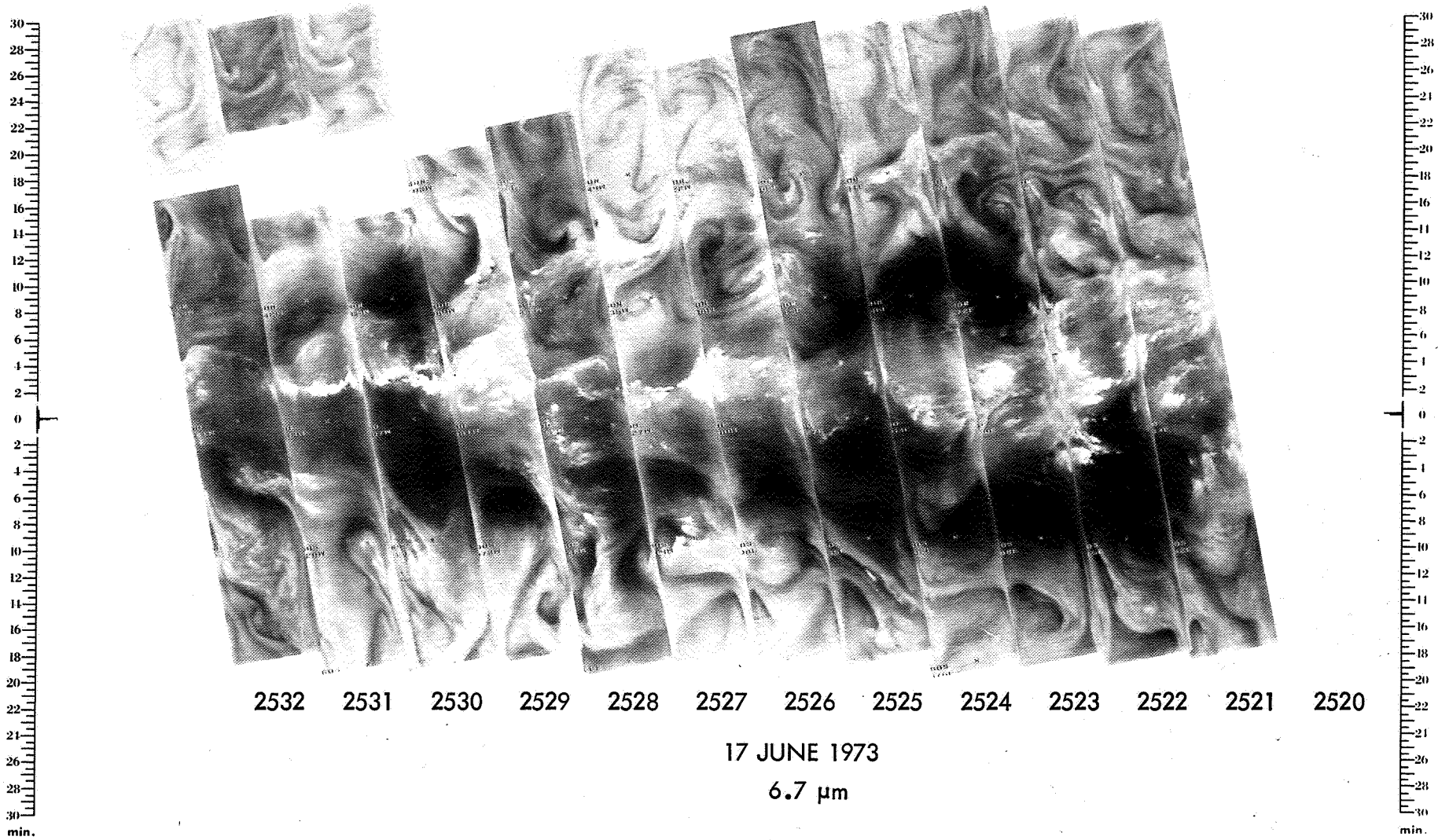


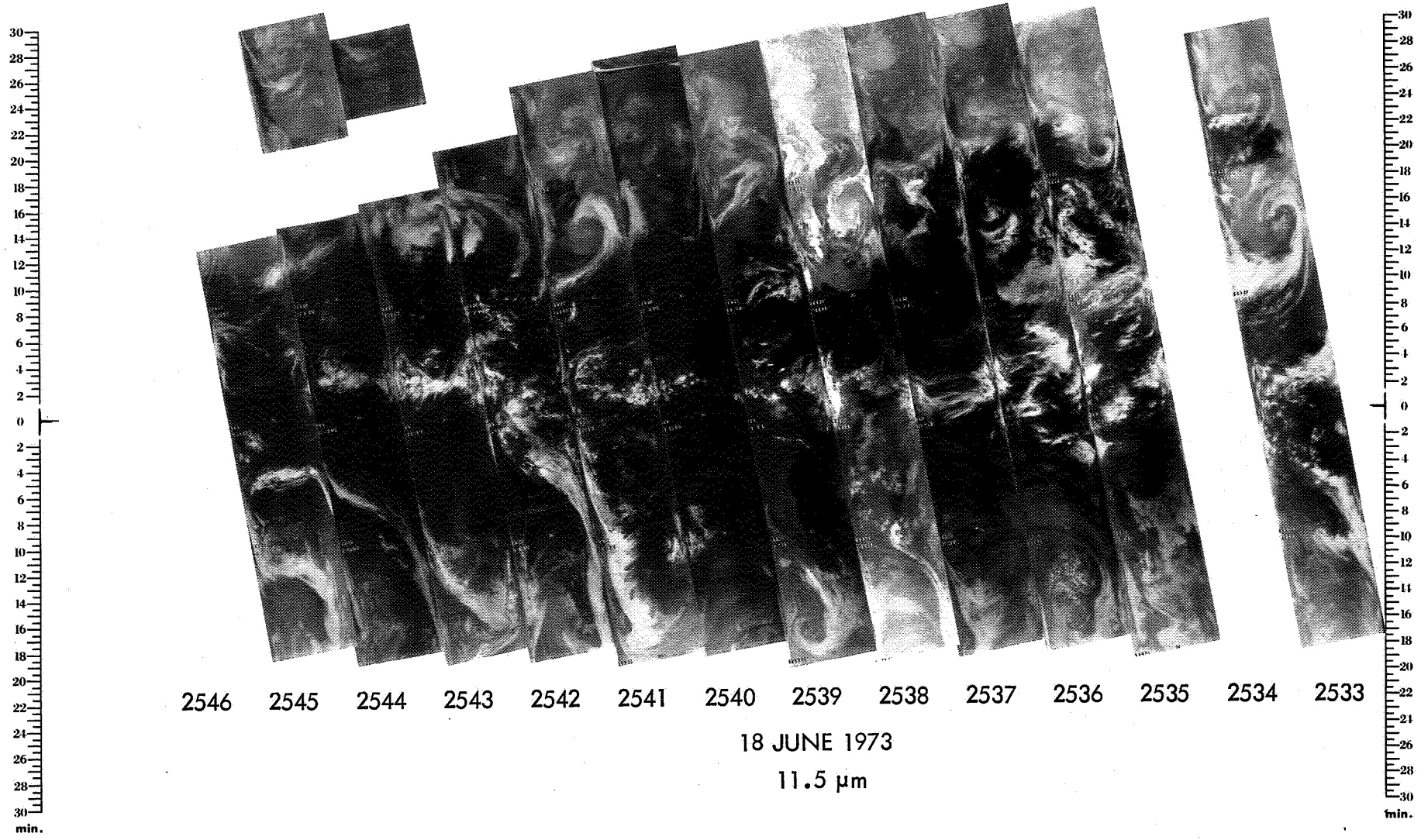
2532 2531 2530 2529 2528 2527 2526 2525 2524 2523 2522 2521 2520

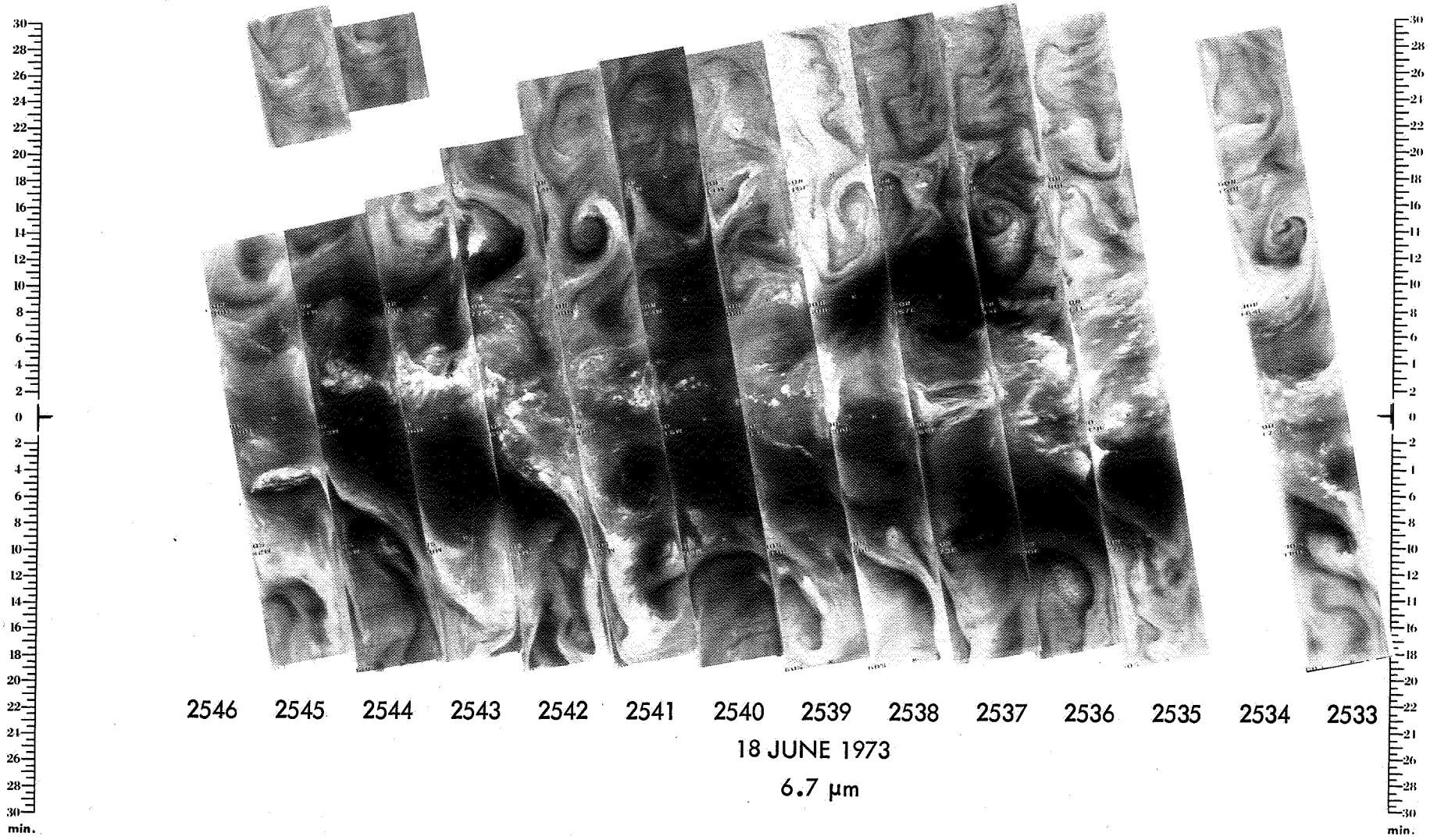
17 JUNE 1973

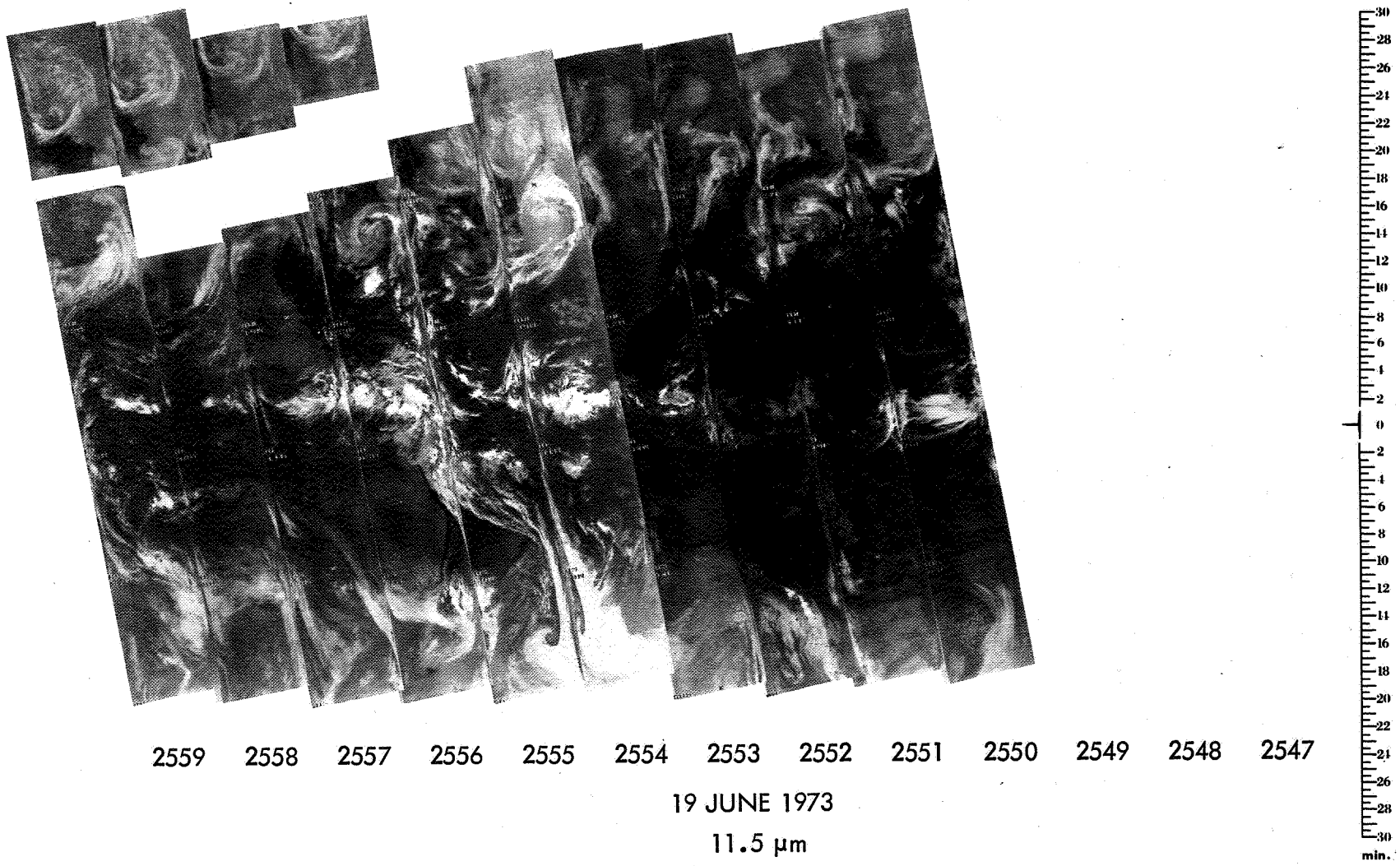
11.5 μm

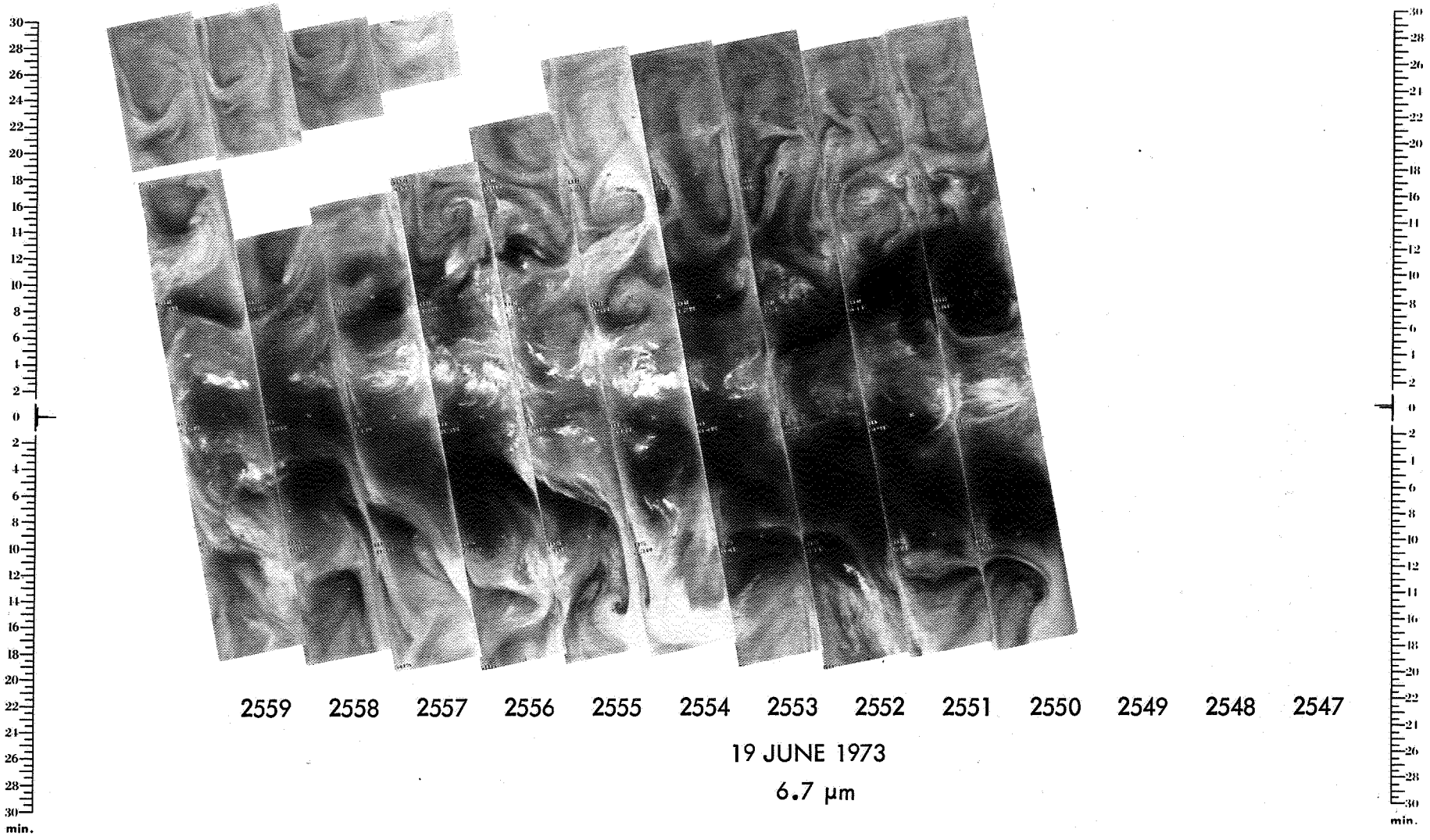
min.

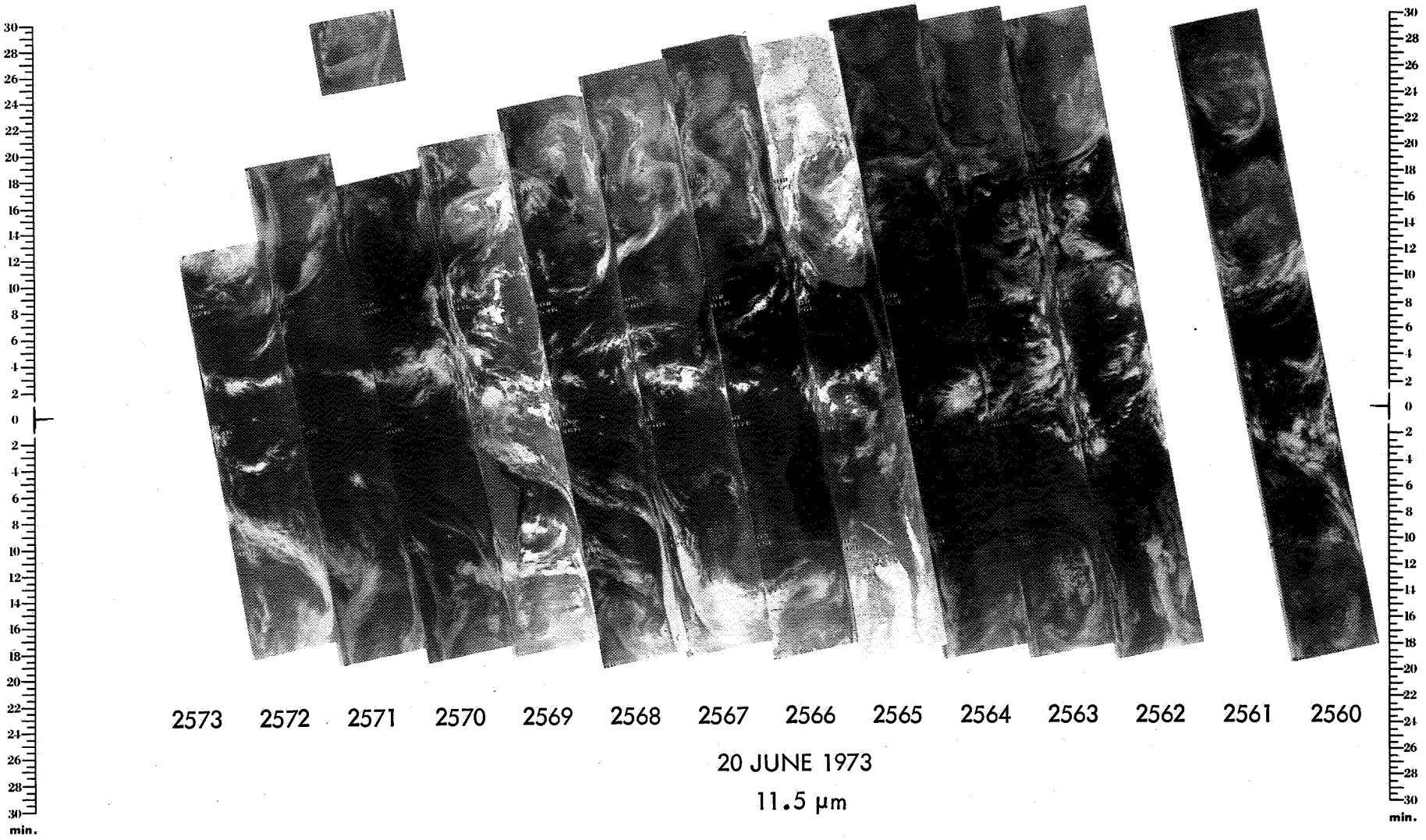

2532 2531 2530 2529 2528 2527 2526 2525 2524 2523 2522 2521 2520
17 JUNE 1973
6.7 μm
min.
min.

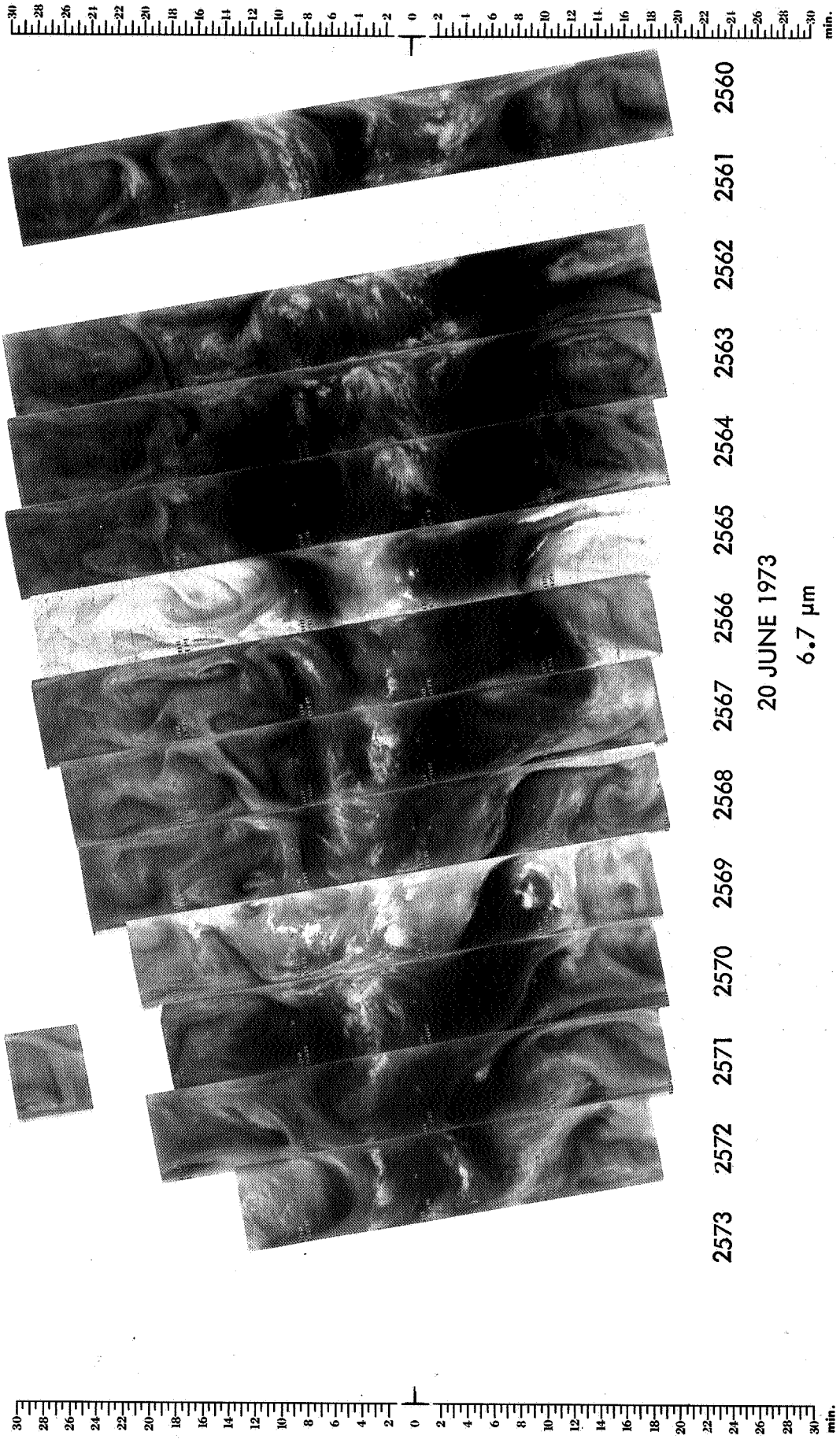

2546
2545
2544
2543
2542
2541
2540
2539
2538
2537
2536
2535
2534
2533
18 JUNE 1973
11.5 μm
min.
min.

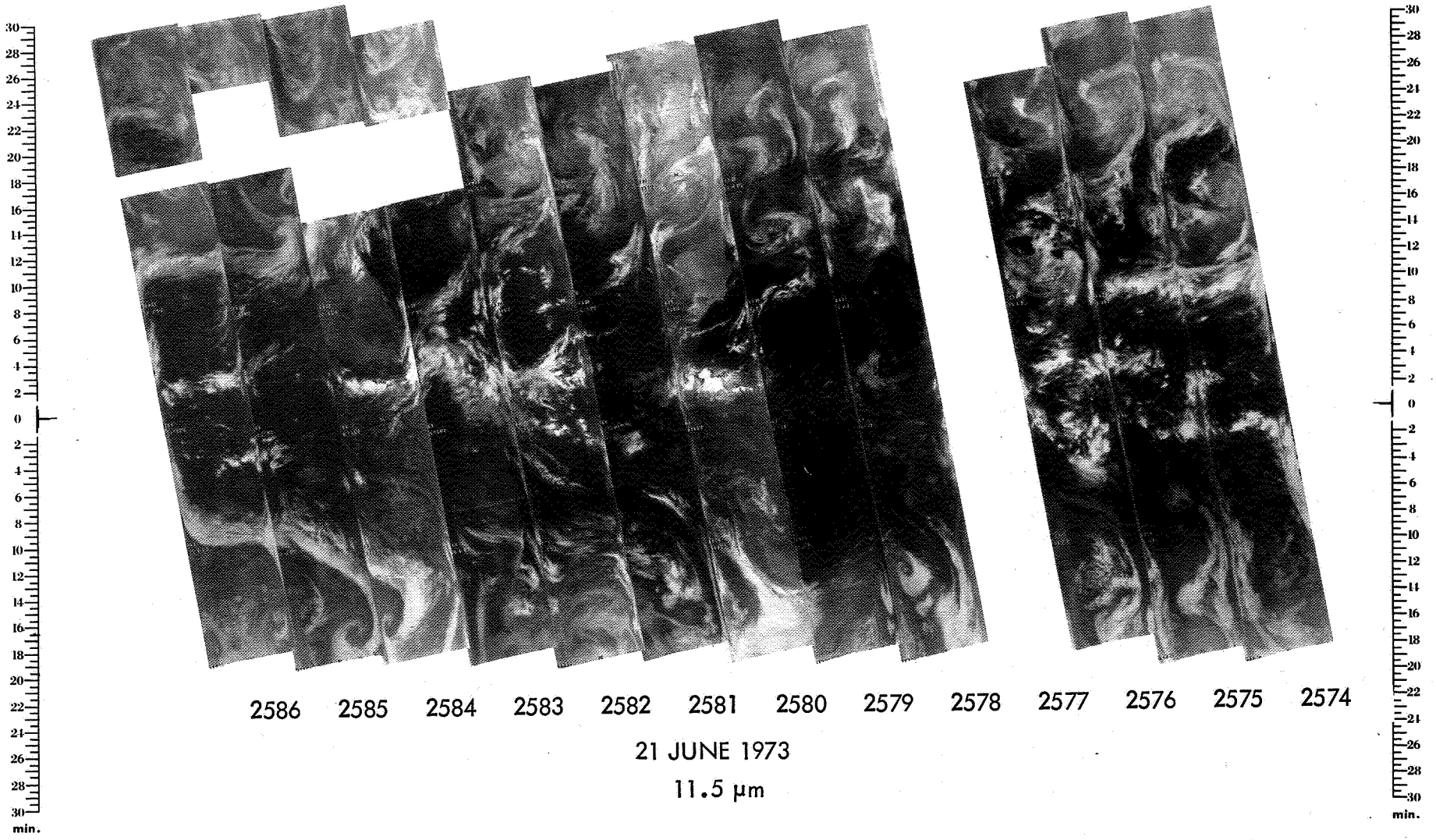

2546 2545 2544 2543 2542 2541 2540 2539 2538 2537 2536 2535 2534 2533
18 JUNE 1973
6.7 μm
min.
min.

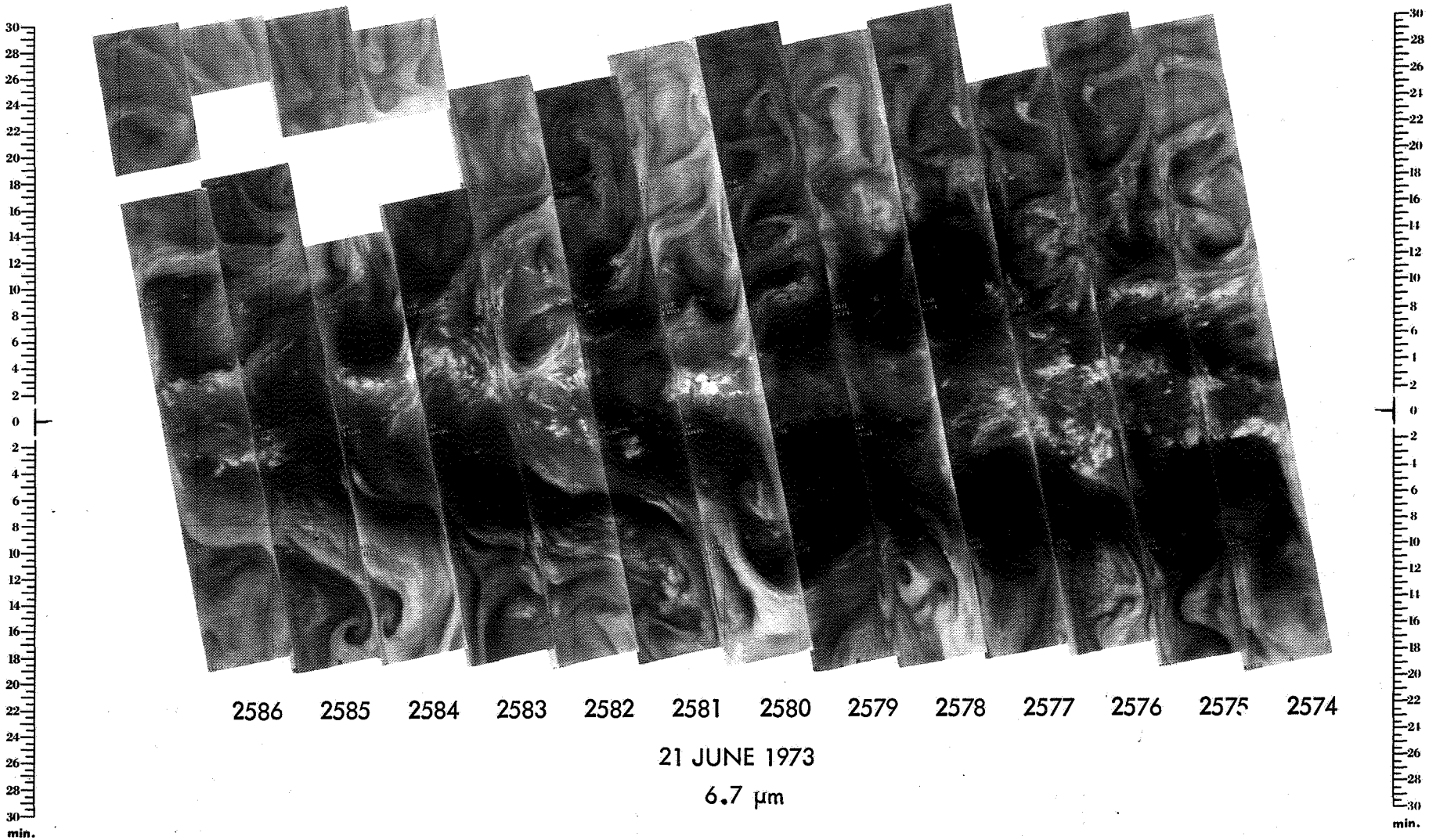

2559 2558 2557 2556 2555 2554 2553 2552 2551 2550 2549 2548 2547
19 JUNE 1973
11.5 μm
min.
min.

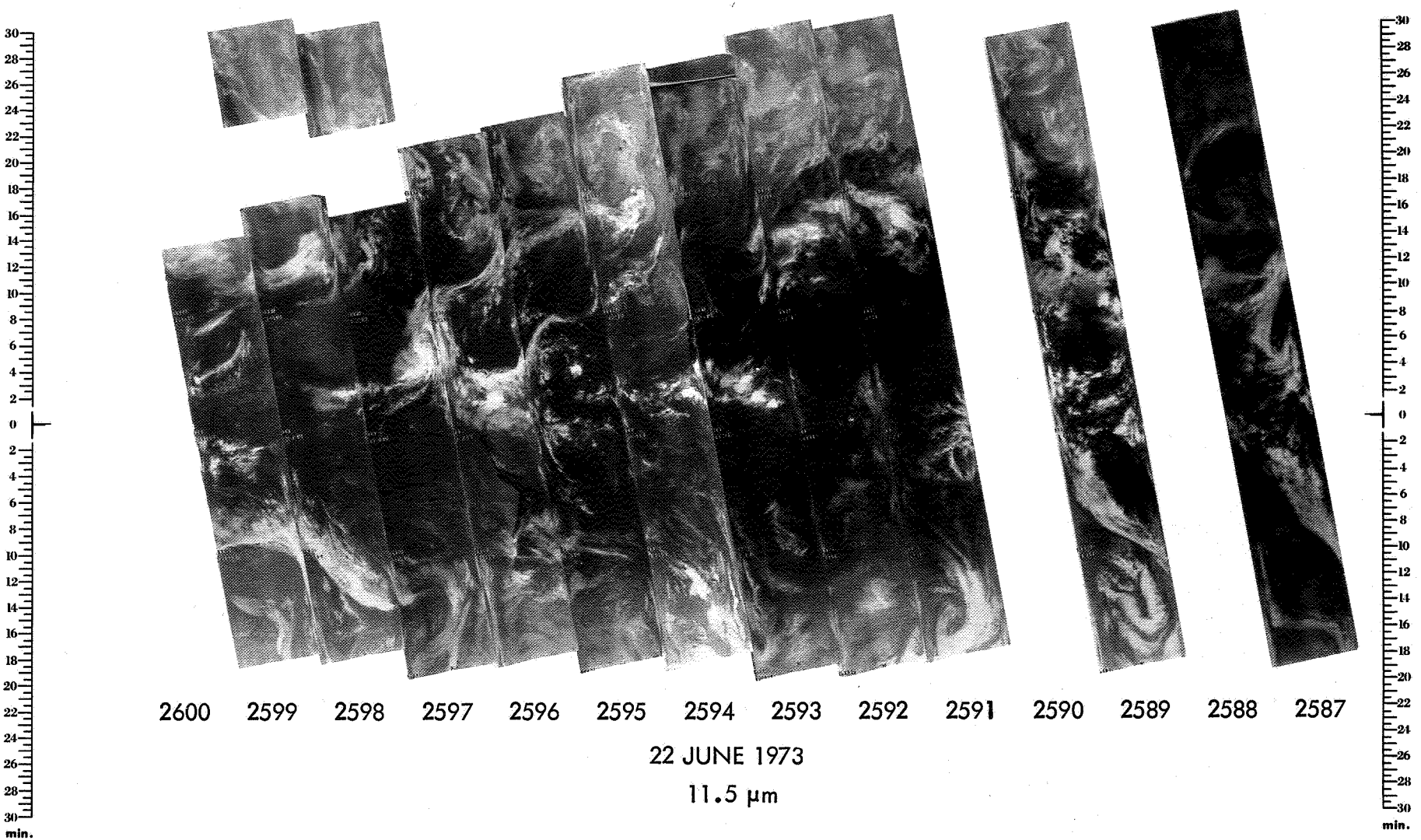

2559 2558 2557 2556 2555 2554 2553 2552 2551 2550 2549 2548 2547
19 JUNE 1973
6.7 μm
min.
min.

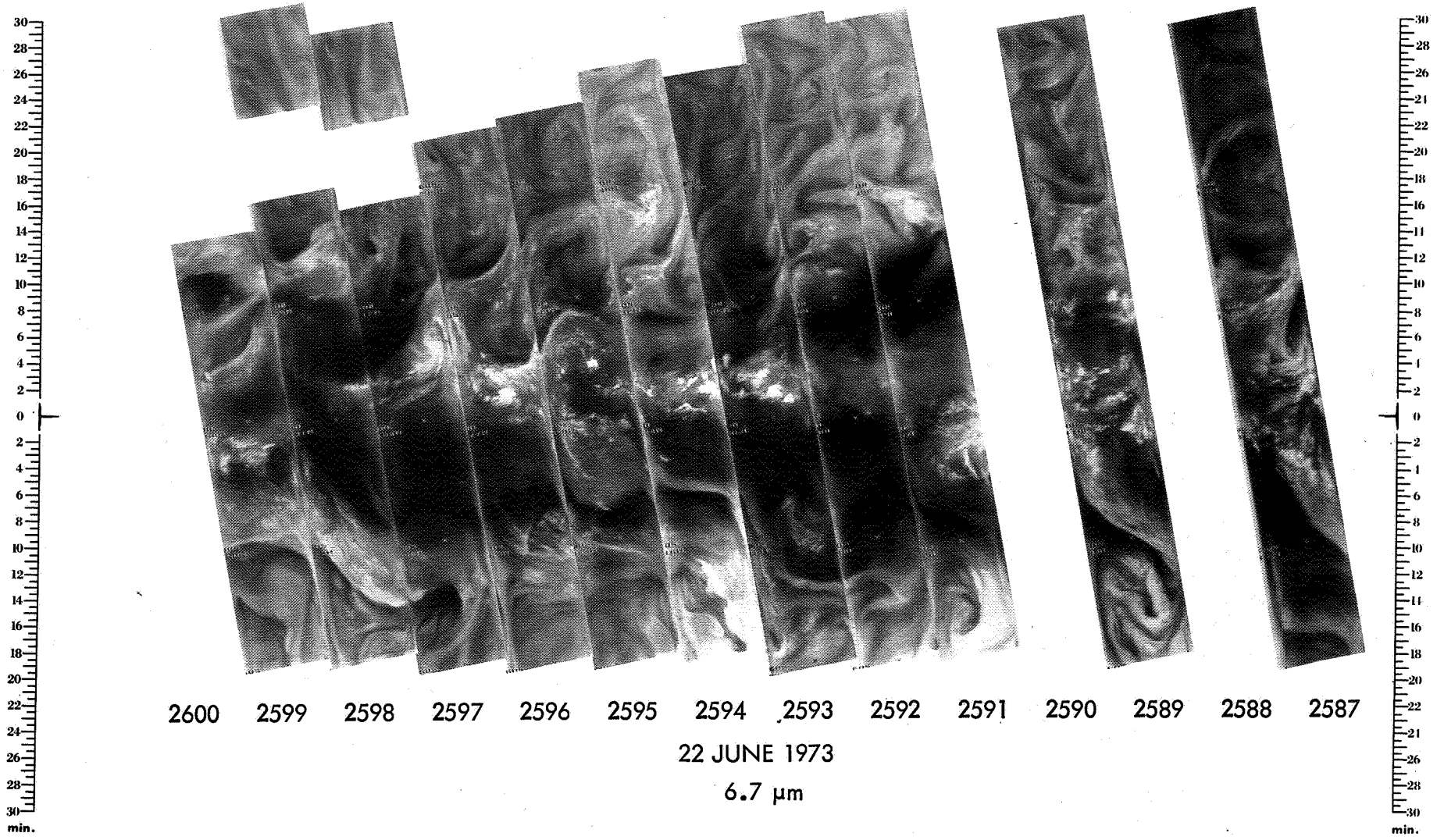

2573
2572
2571
2570
2569
2568
2567
2566
2565
2564
2563
2562
2561
2560
20 JUNE 1973
11.5 μm
min.
min.

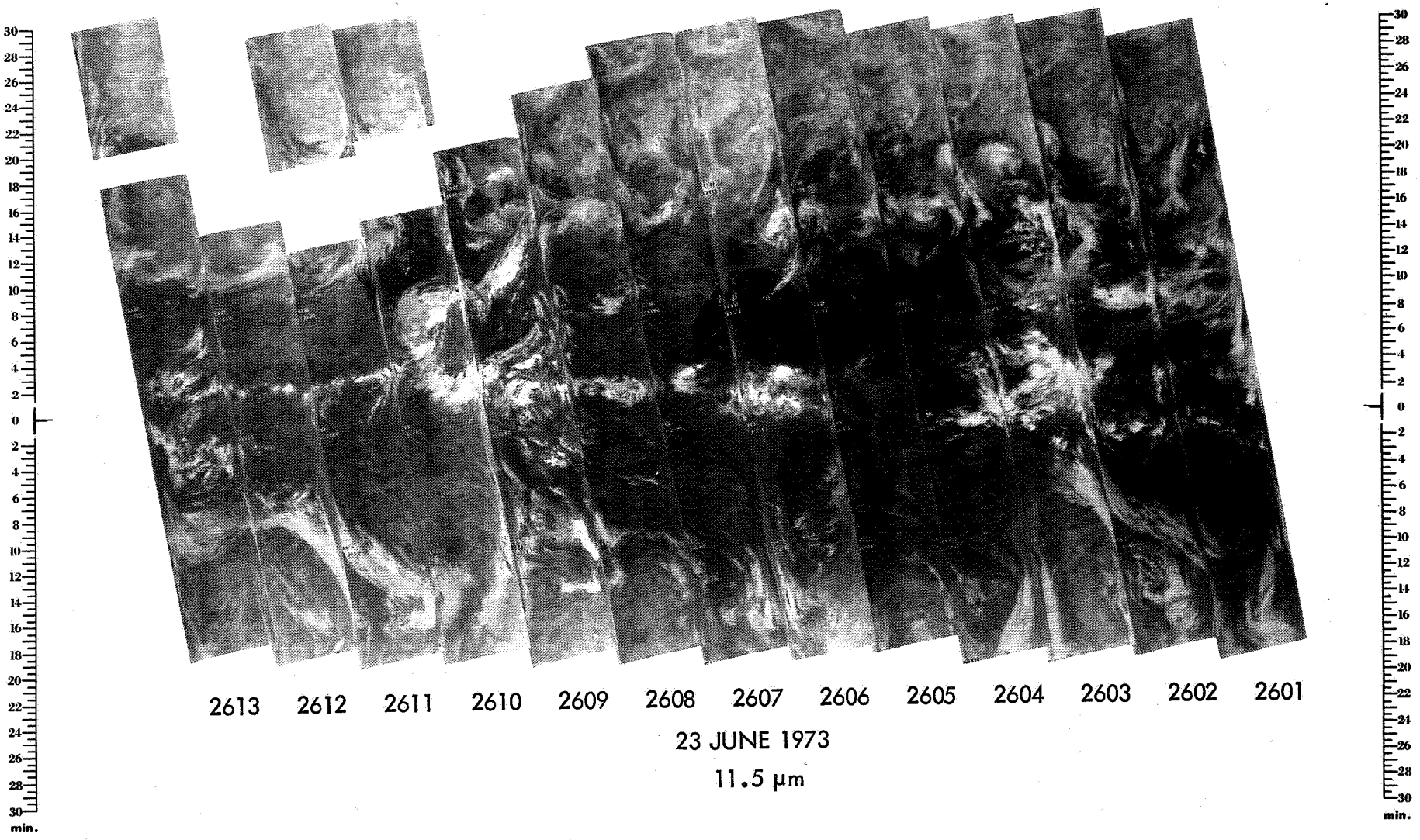

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 min.
2560
2561
2562
2563
2564
2565
2566
2567
2568
2569
2570
2571
2572
2573
20 JUNE 1973
6.7 μm

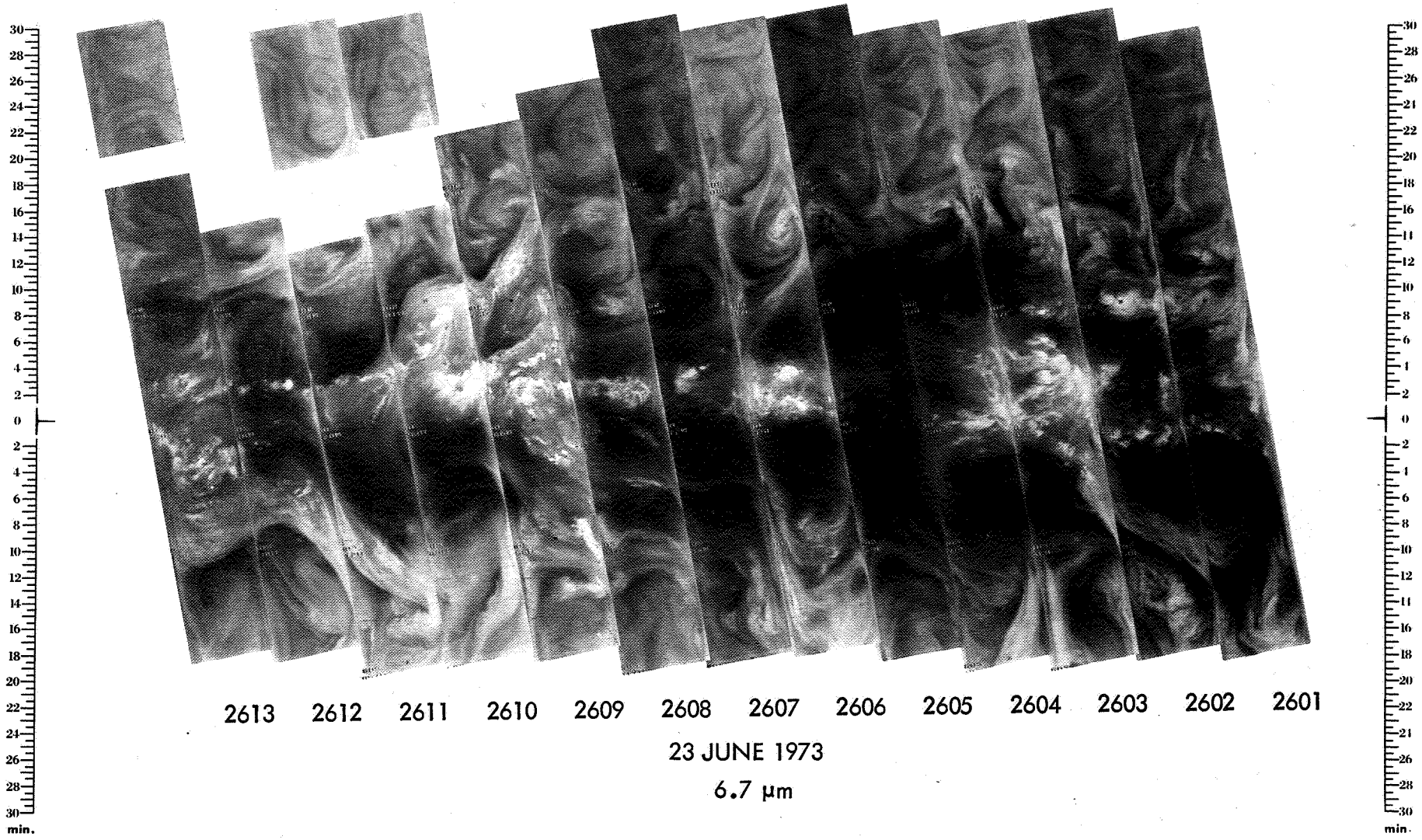

2586 2585 2584 2583 2582 2581 2580 2579 2578 2577 2576 2575 2574
21 JUNE 1973
11.5 μm
min.
min.

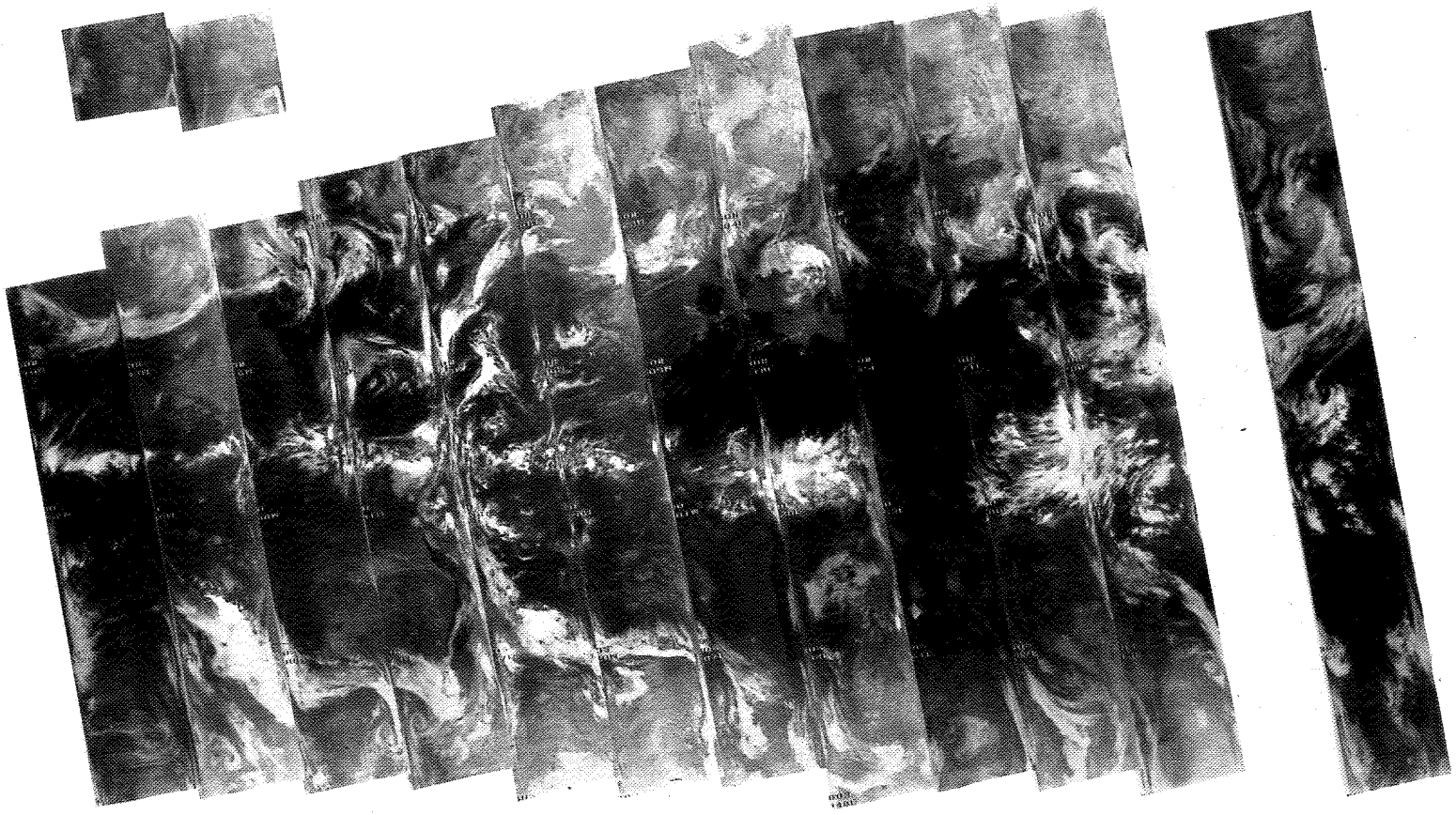

2586
2585
2584
2583
2582
2581
2580
2579
2578
2577
2576
2575
2574
21 JUNE 1973
6.7 μm
min.
min.

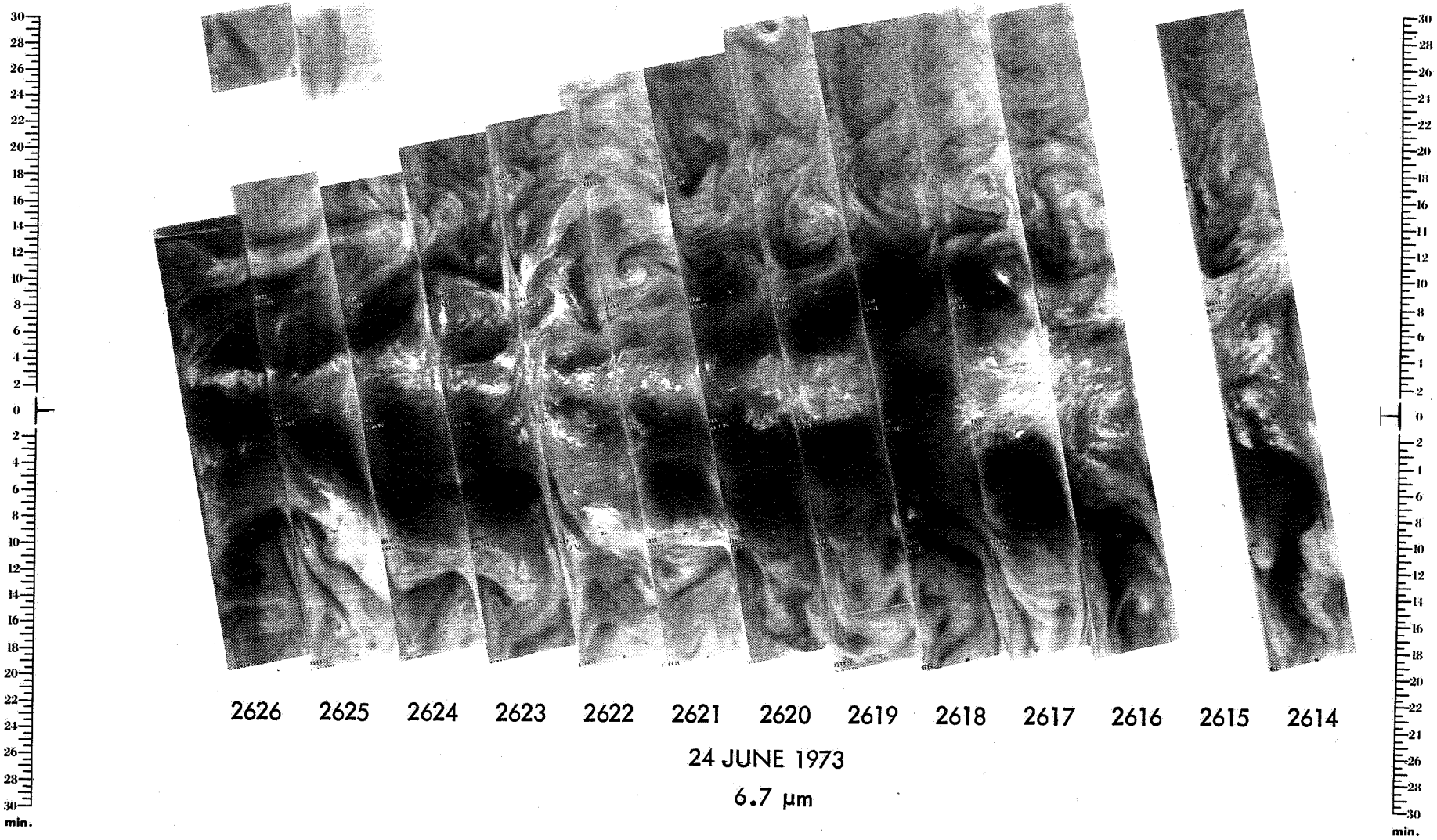

2600 2599 2598 2597 2596 2595 2594 2593 2592 2591 2590 2589 2588 2587
22 JUNE 1973
11.5 μm
min.
min.

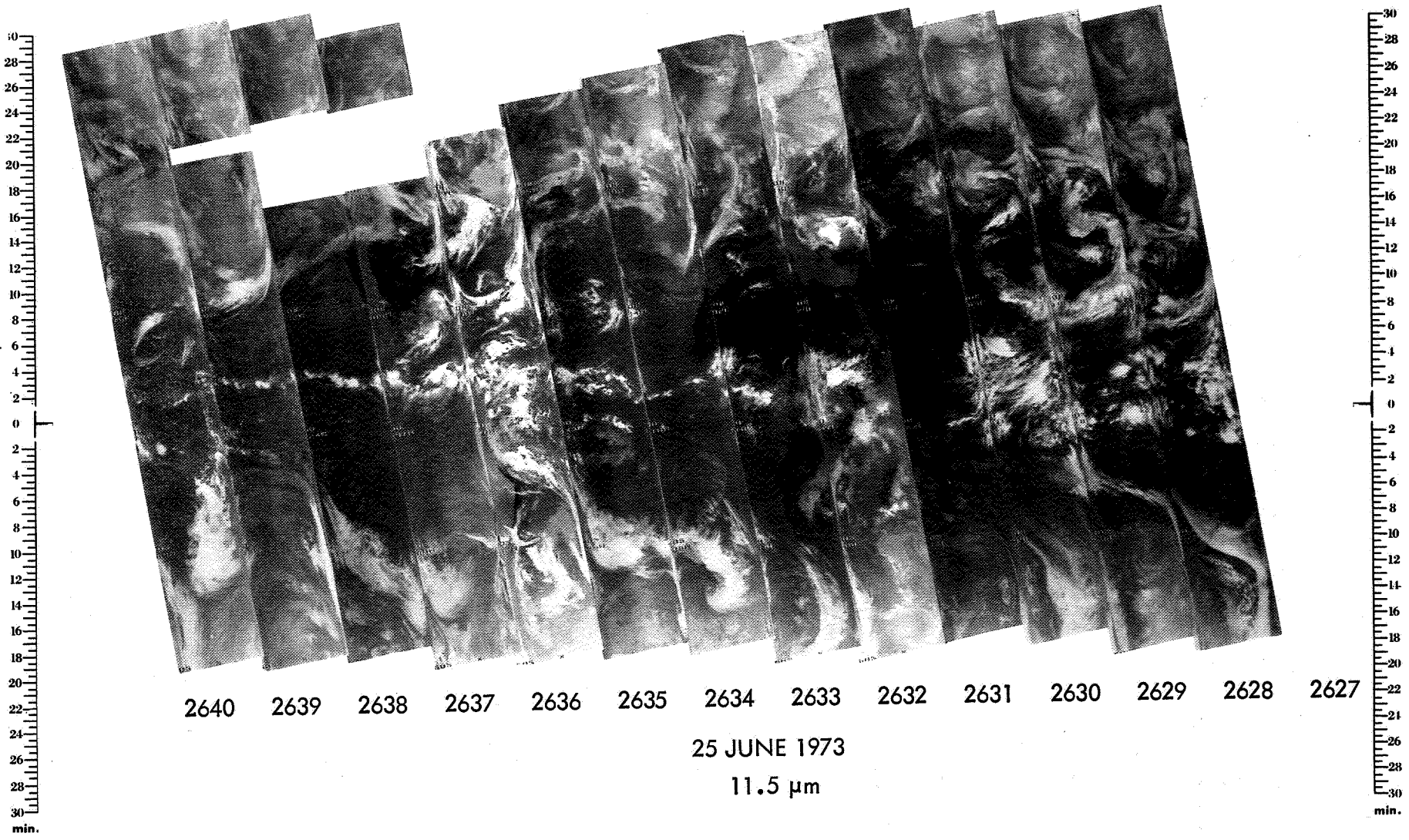

2600 2599 2598 2597 2596 2595 2594 2593 2592 2591 2590 2589 2588 2587
22 JUNE 1973
6.7 μm
min.
min.

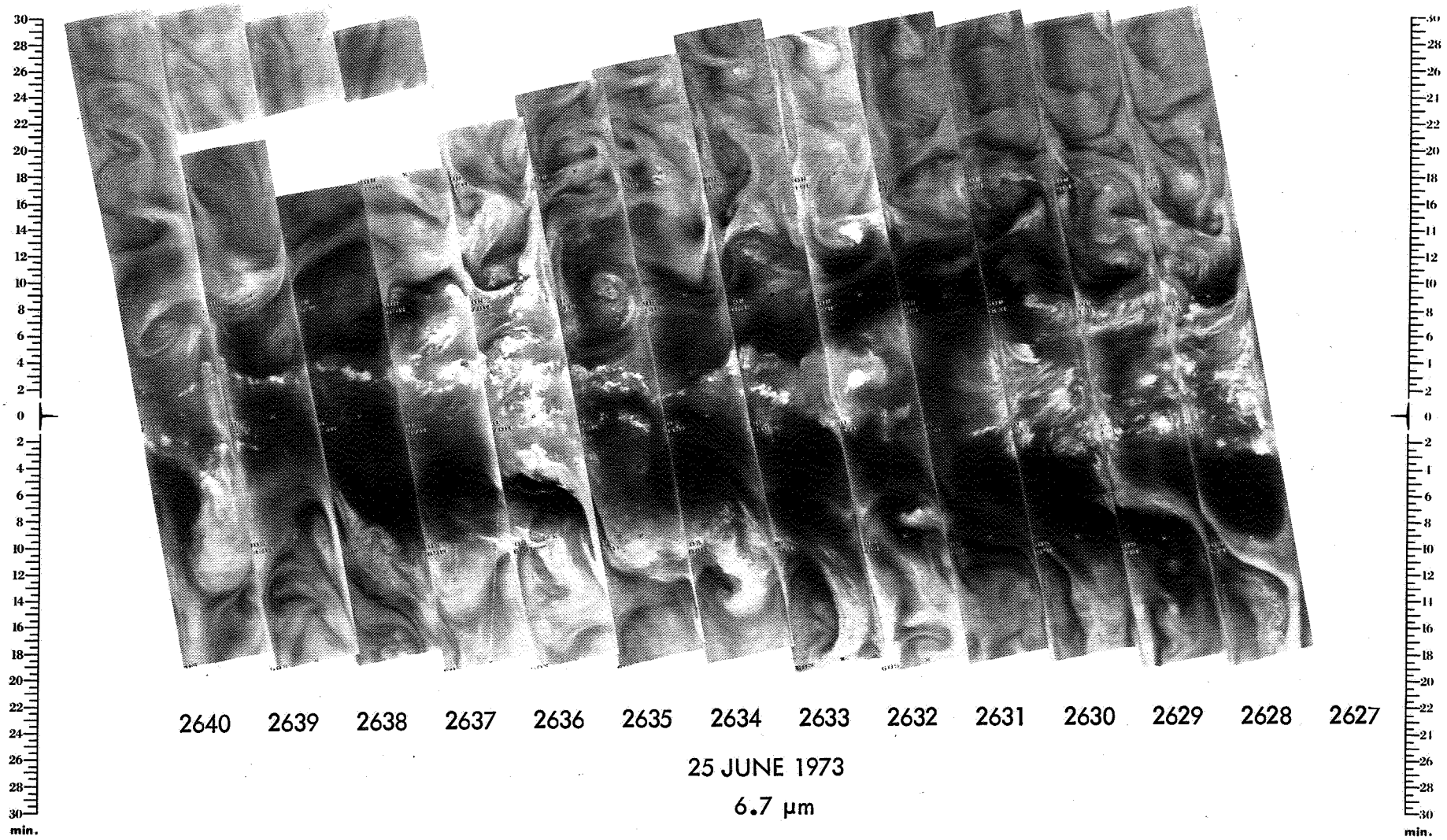

2613 2612 2611 2610 2609 2608 2607 2606 2605 2604 2603 2602 2601
23 JUNE 1973
11.5 μm
min.
min.

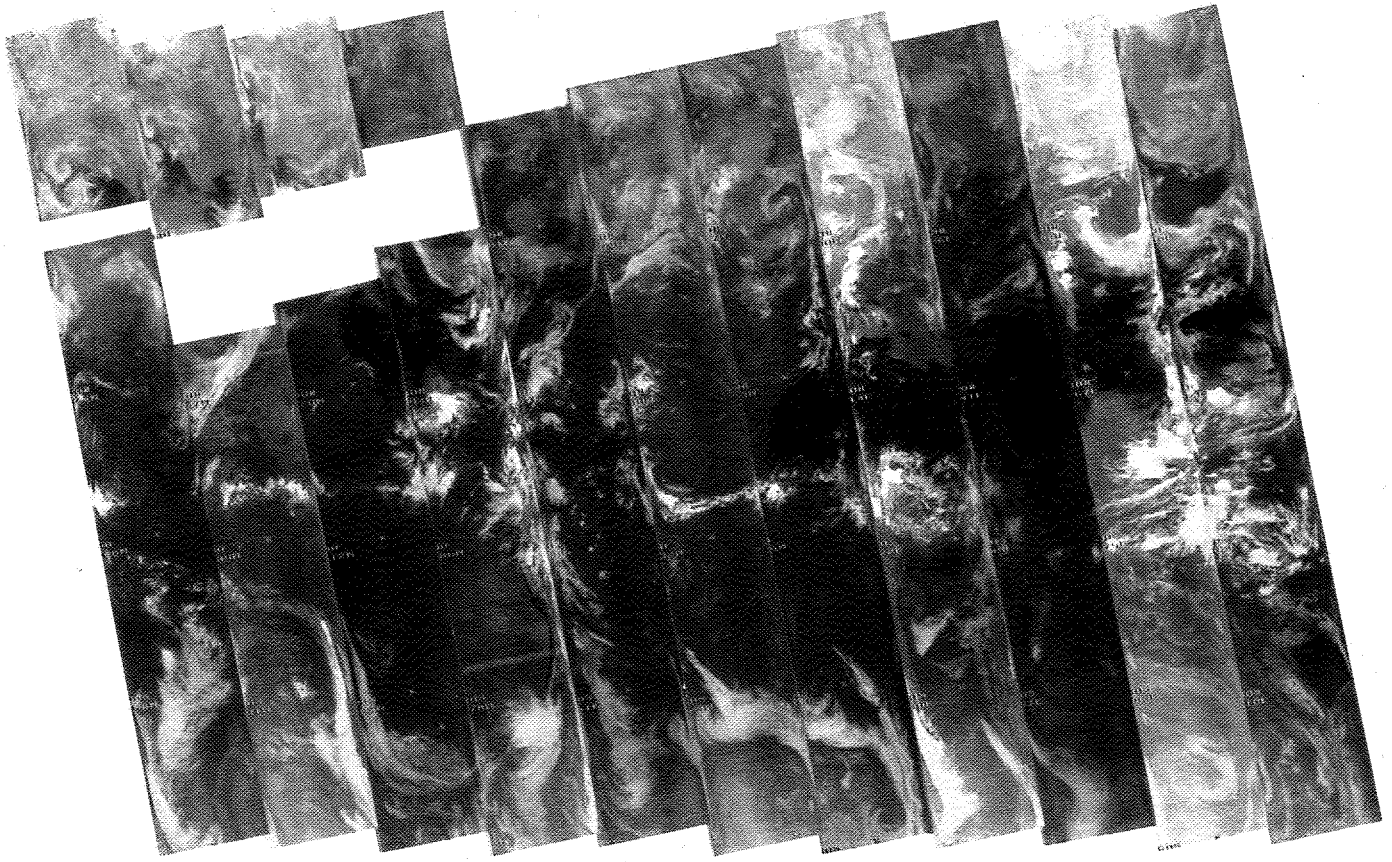

2613 2612 2611 2610 2609 2608 2607 2606 2605 2604 2603 2602 2601
23 JUNE 1973
6.7 μm
min.
min.


2626
2625
2624
2623
2622
2621
2620
2619
2618
2617
2616
2615
2614
24 JUNE 1973
11.5 μm
min.
min.


2626
2625
2624
2623
2622
2621
2620
2619
2618
2617
2616
2615
2614
24 JUNE 1973
6.7 μm
min.
min.


2640
2639
2638
2637
2636
2635
2634
2633
2632
2631
2630
2629
2628
2627
25 JUNE 1973
11.5 μm
min.
min.


2640
2639
2638
2637
2636
2635
2634
2633
2632
2631
2630
2629
2628
2627
25 JUNE 1973
6.7 μm
min.
min.

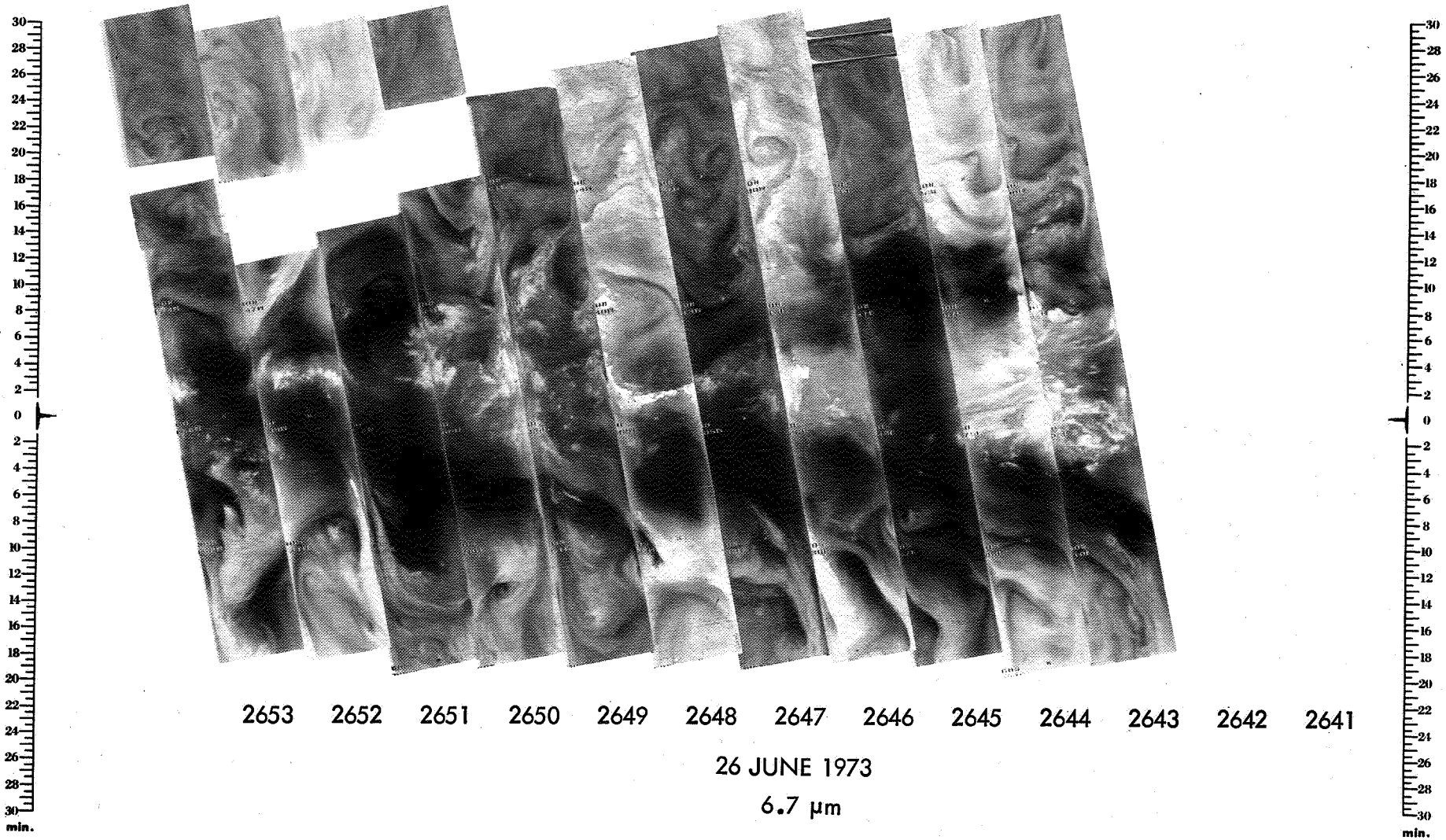


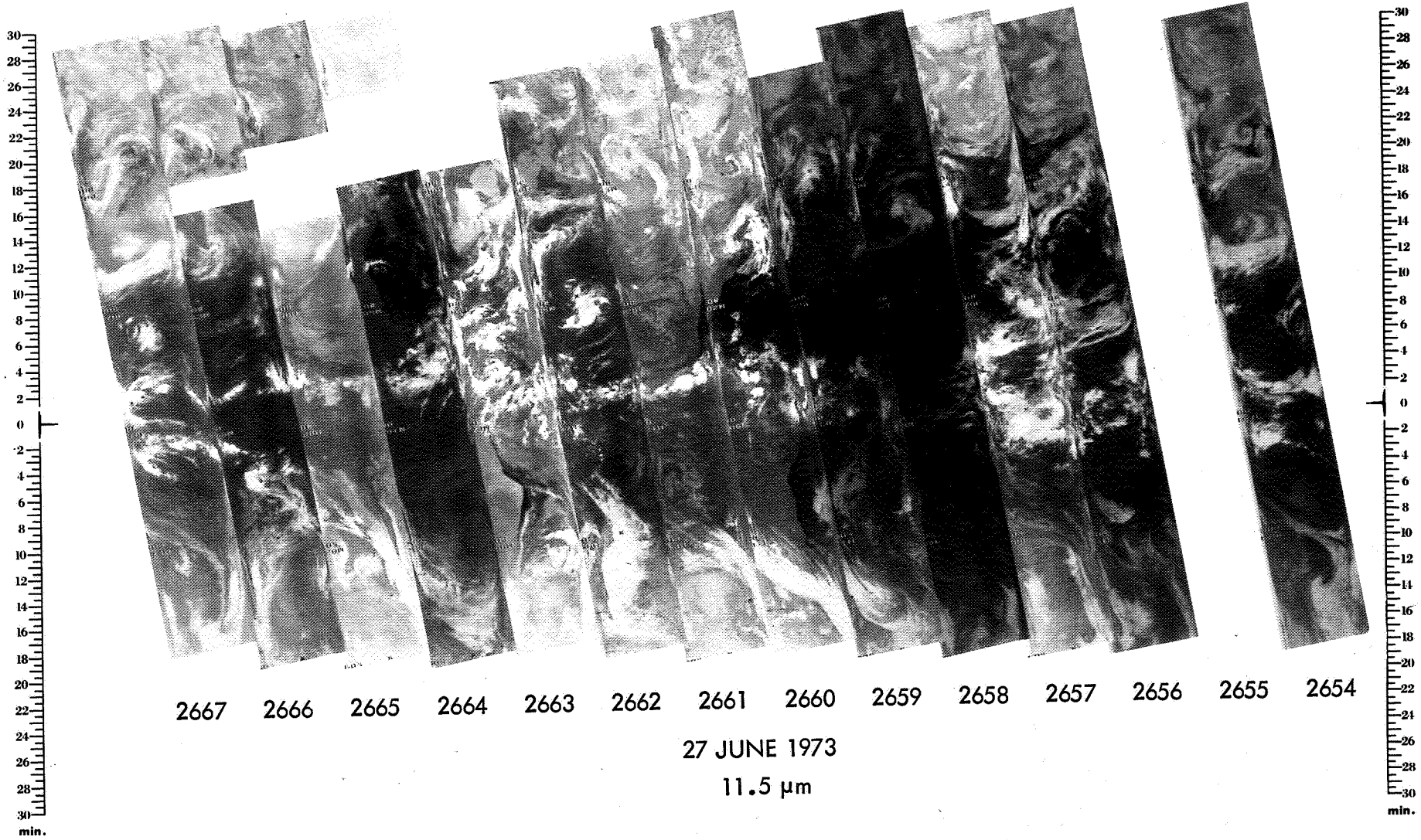
2653 2652 2651 2650 2649 2648 2647 2646 2645 2644 2643 2642 2641

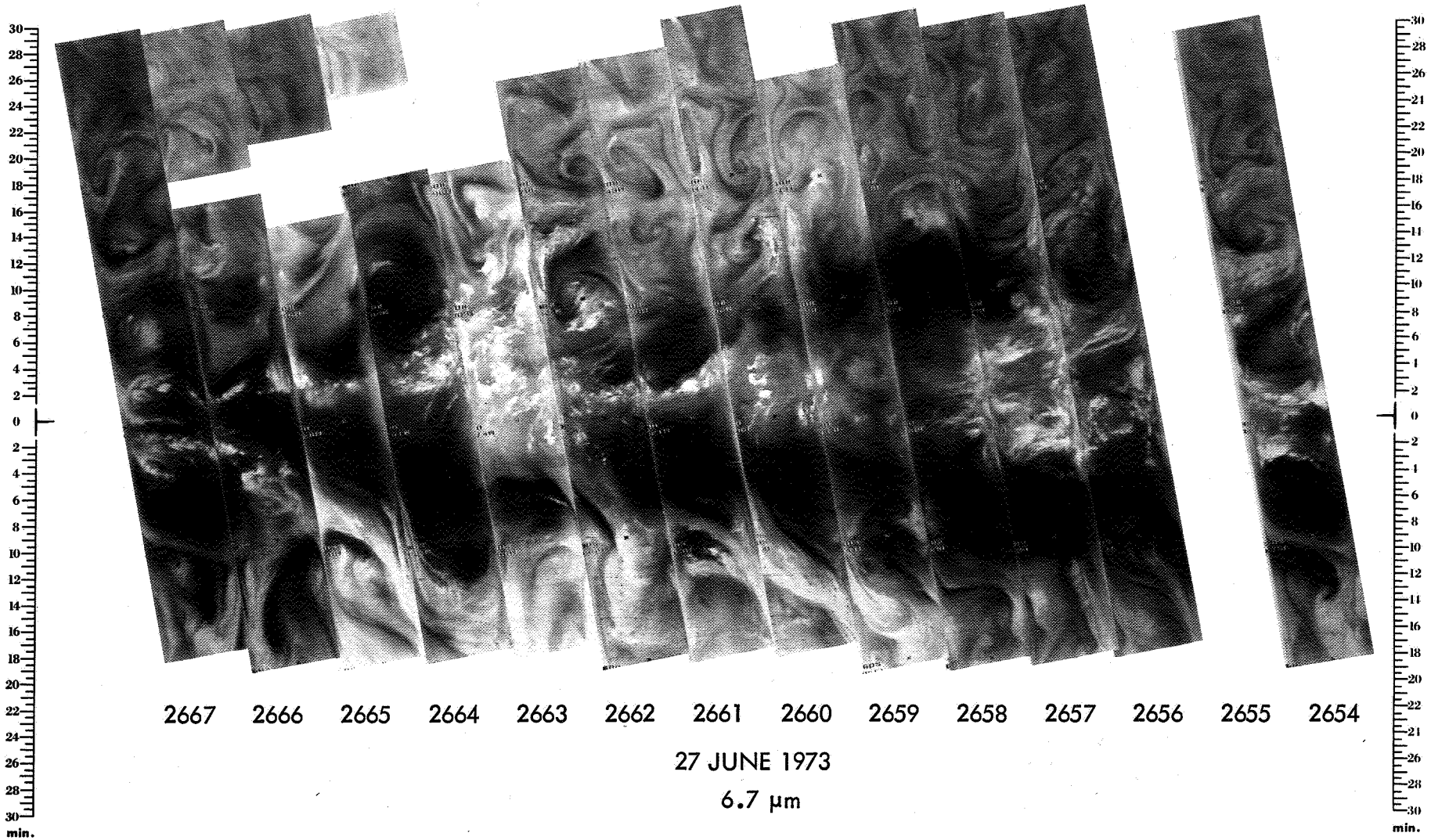
26 JUNE 1973

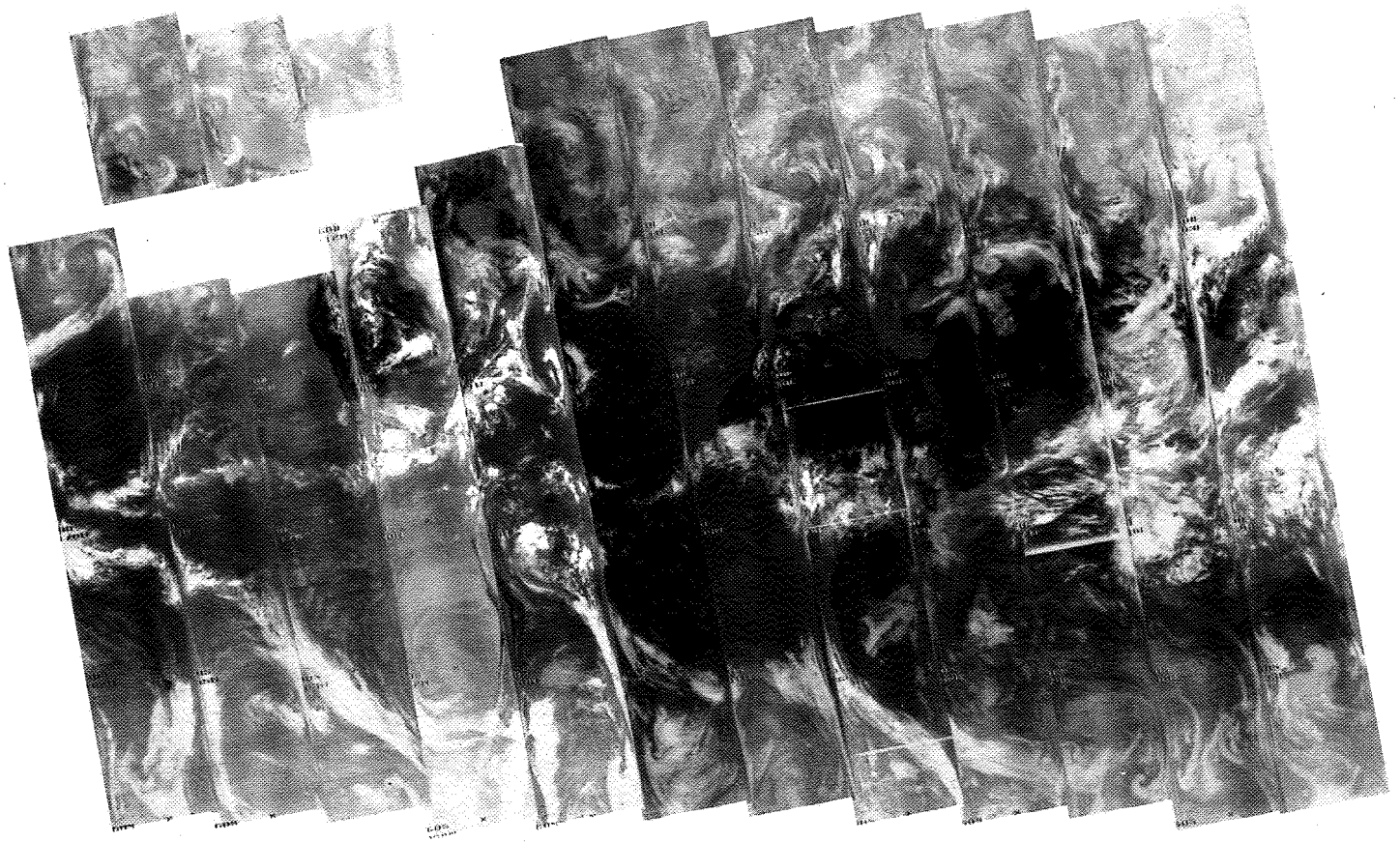
11.5 μm

min.


30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
min.
2653 2652 2651 2650 2649 2648 2647 2646 2645 2644 2643 2642 2641
26 JUNE 1973
6.7 μm


2667
2666
2665
2664
2663
2662
2661
2660
2659
2658
2657
2656
2655
2654
27 JUNE 1973
11.5 μm
min.
min.

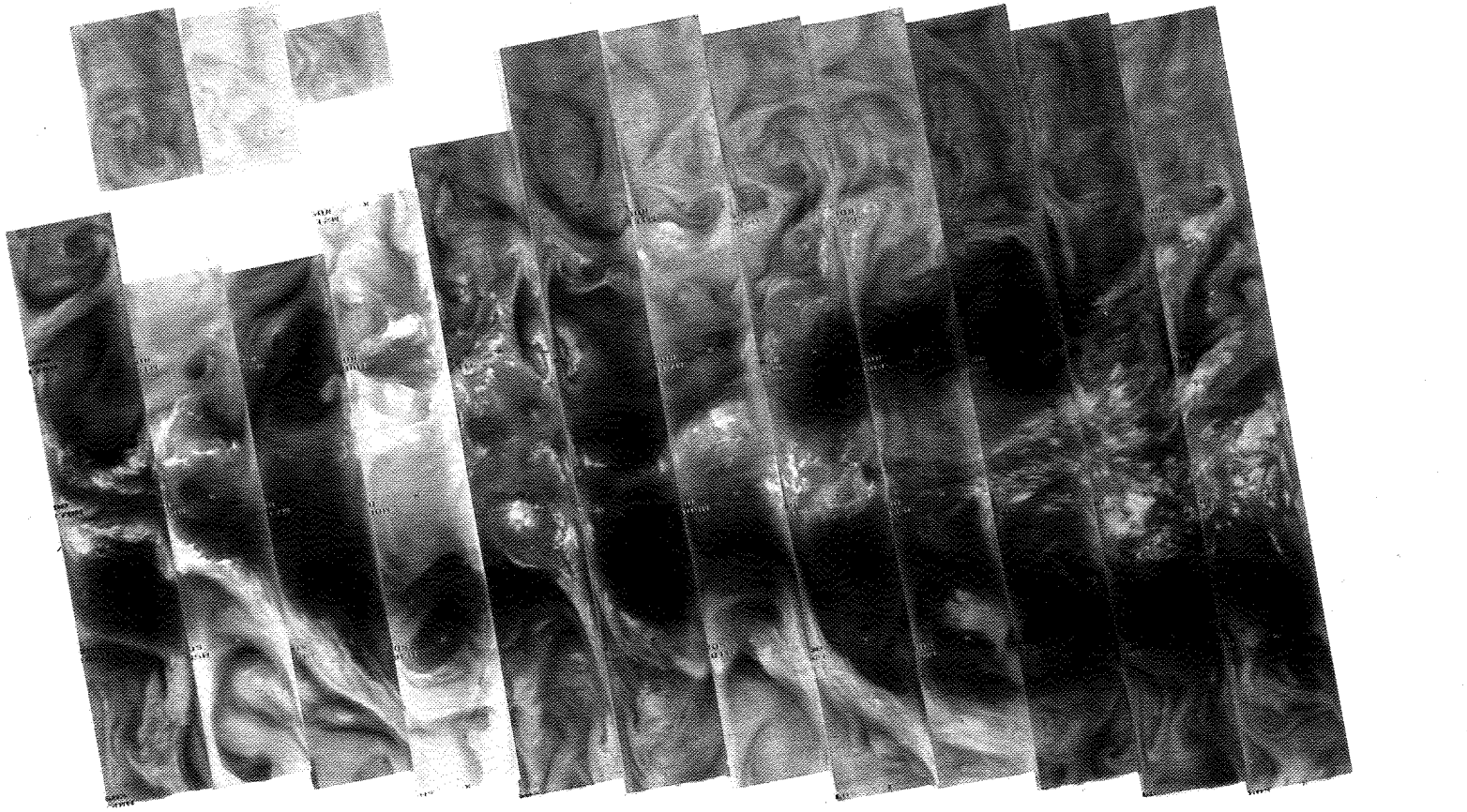

2667
2666
2665
2664
2663
2662
2661
2660
2659
2658
2657
2656
2655
2654
27 JUNE 1973
6.7 μm
min.
min.

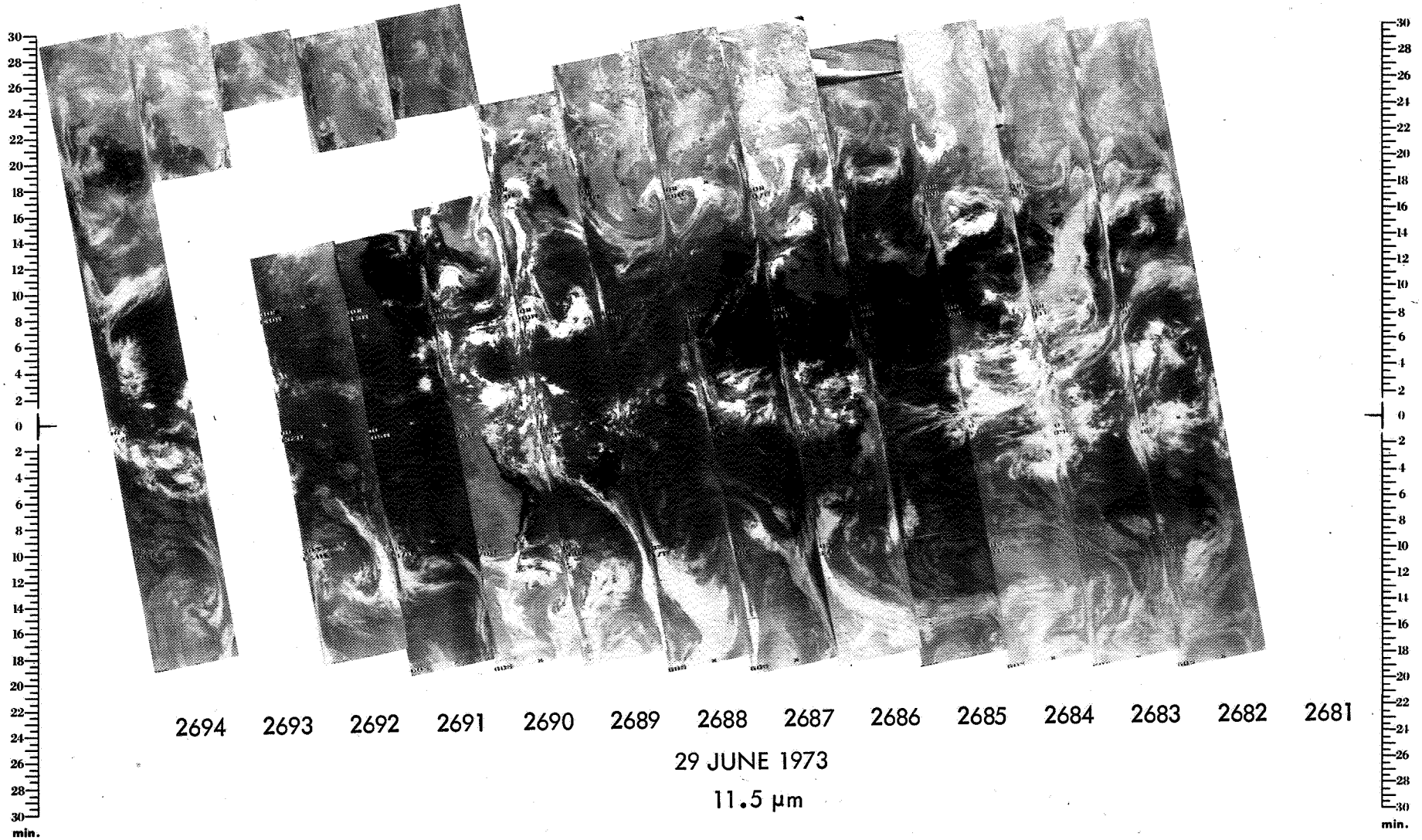


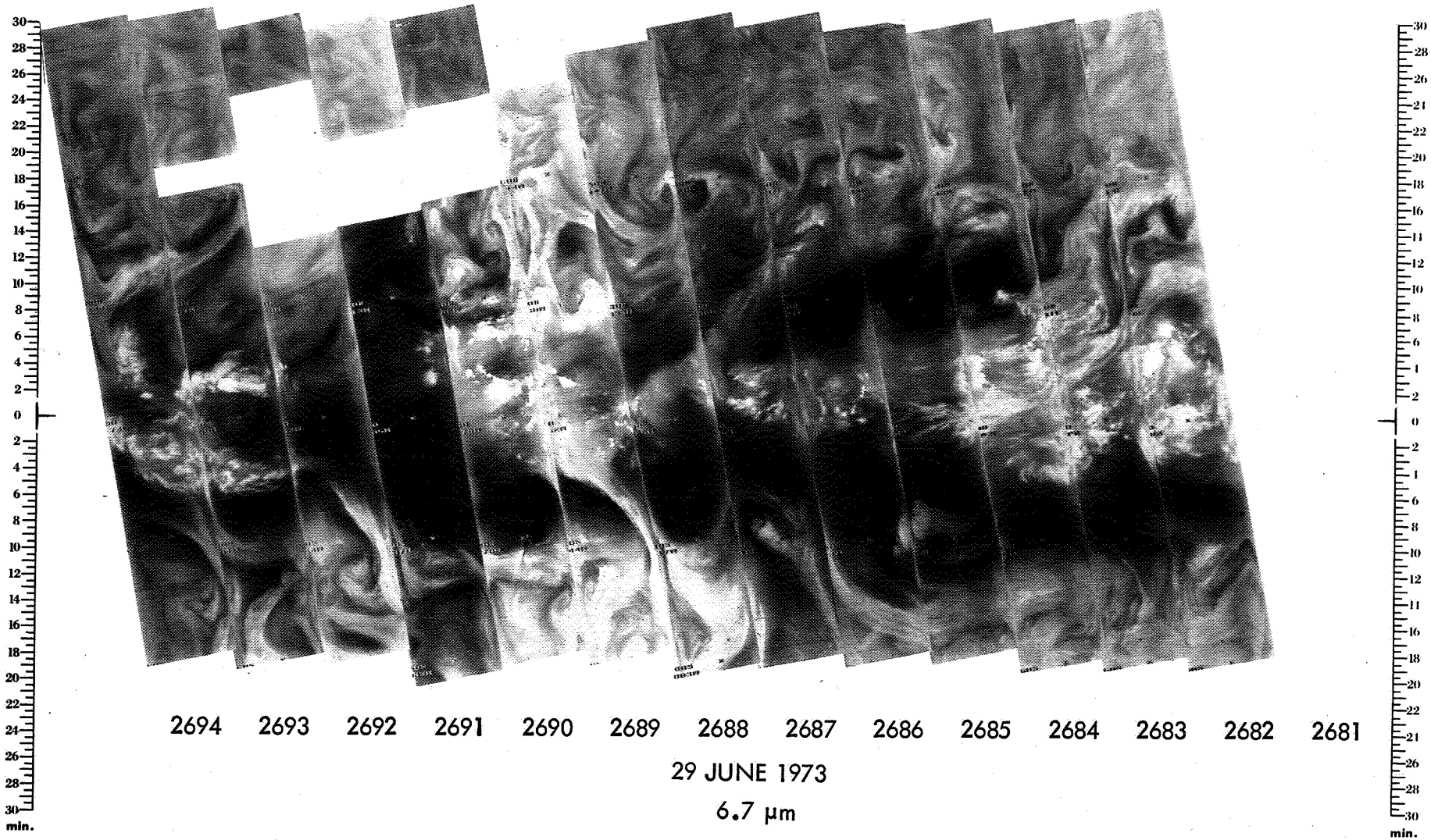
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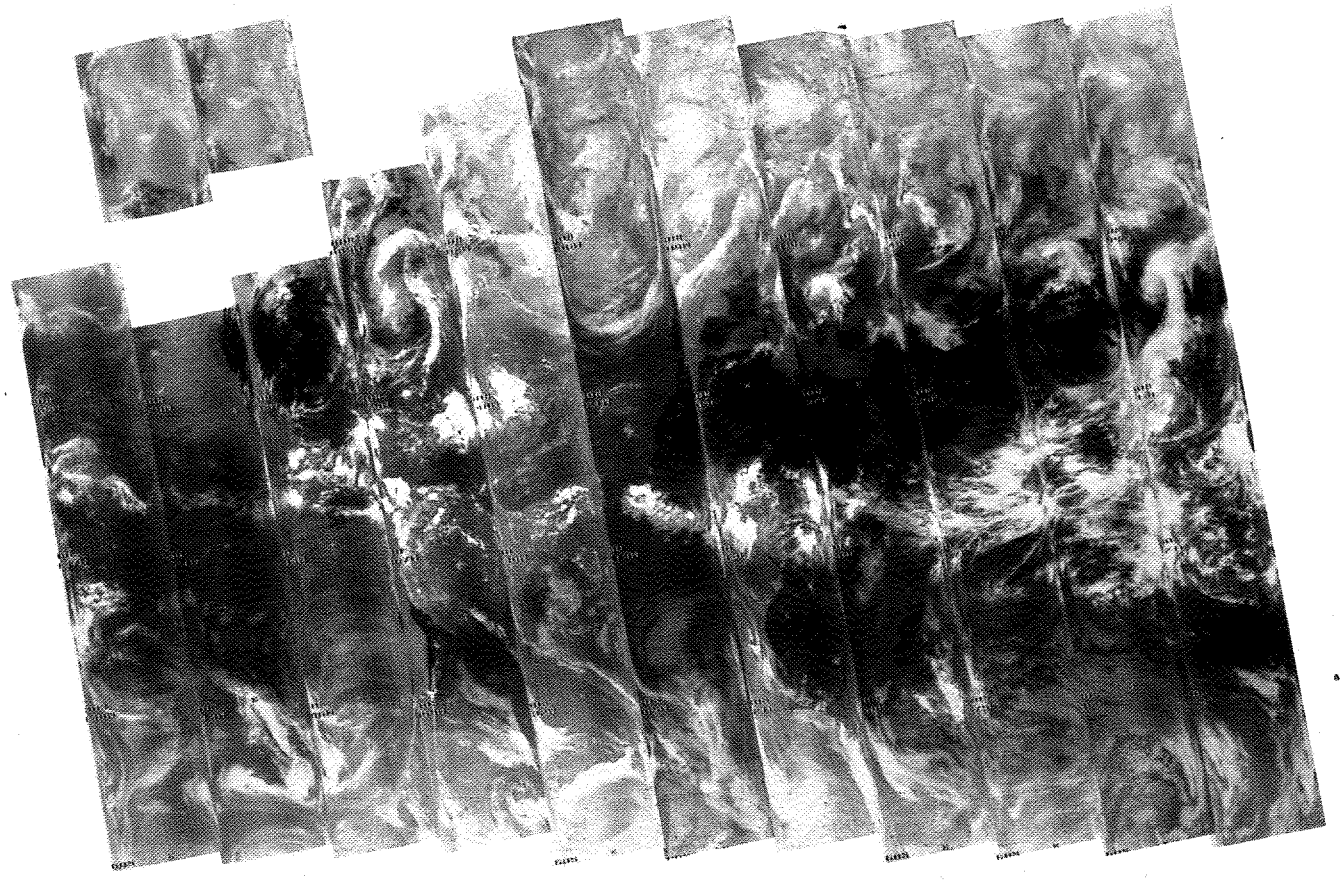
28 JUNE 1973

11.5 μm


2680
2679
2678
2677
2676
2675
2674
2673
2672
2671
2670
2669
2668
28 JUNE 1973
6.7 μm
min.
min.


2694 2693 2692 2691 2690 2689 2688 2687 2686 2685 2684 2683 2682 2681
29 JUNE 1973
11.5 μm
min.
min.

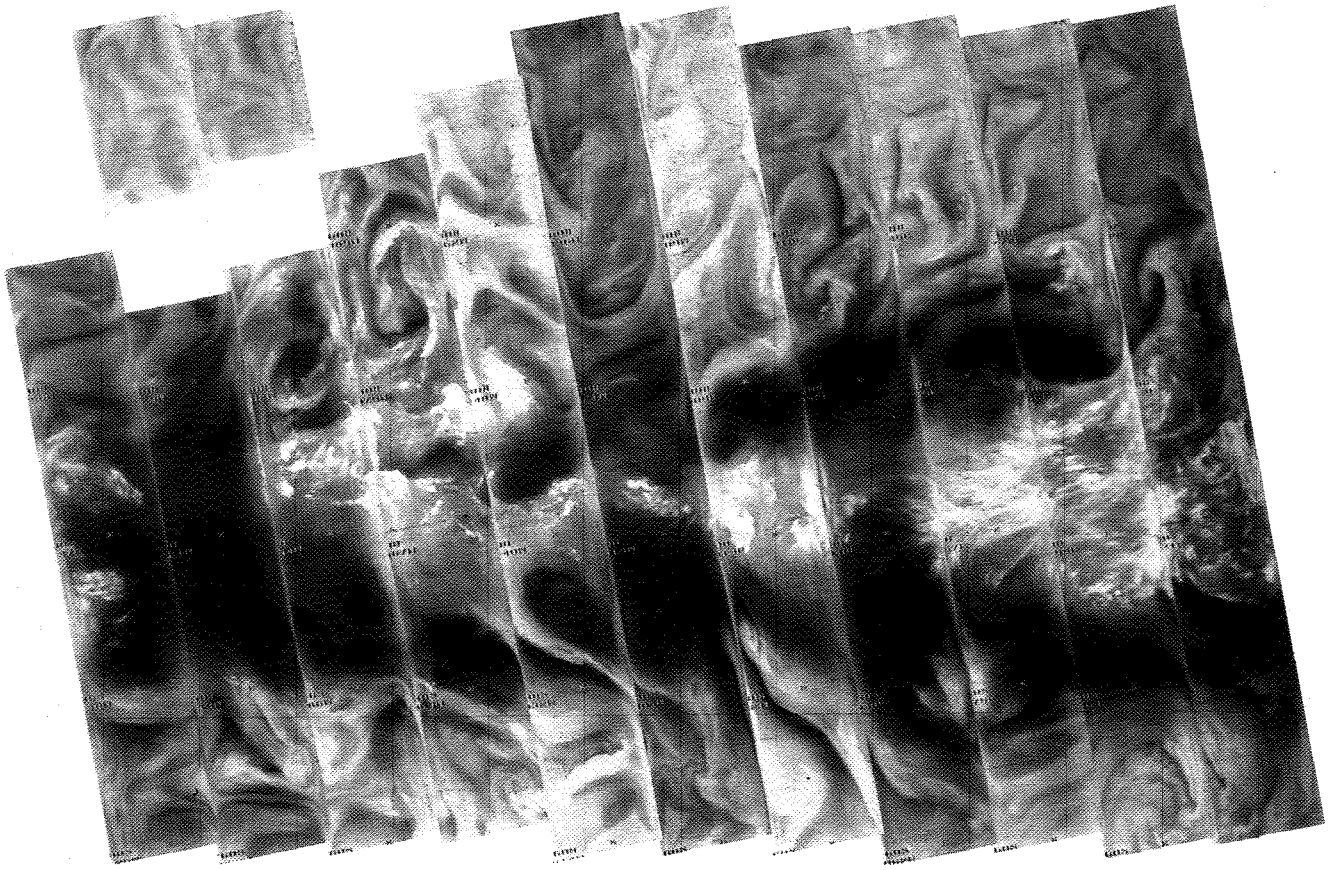

2694 2693 2692 2691 2690 2689 2688 2687 2686 2685 2684 2683 2682 2681
29 JUNE 1973
6.7 μm
min.
min.



2707 2706 2705 2704 2703 2702 2701 2700 2699 2698 2697 2696 2695

30 JUNE 1973

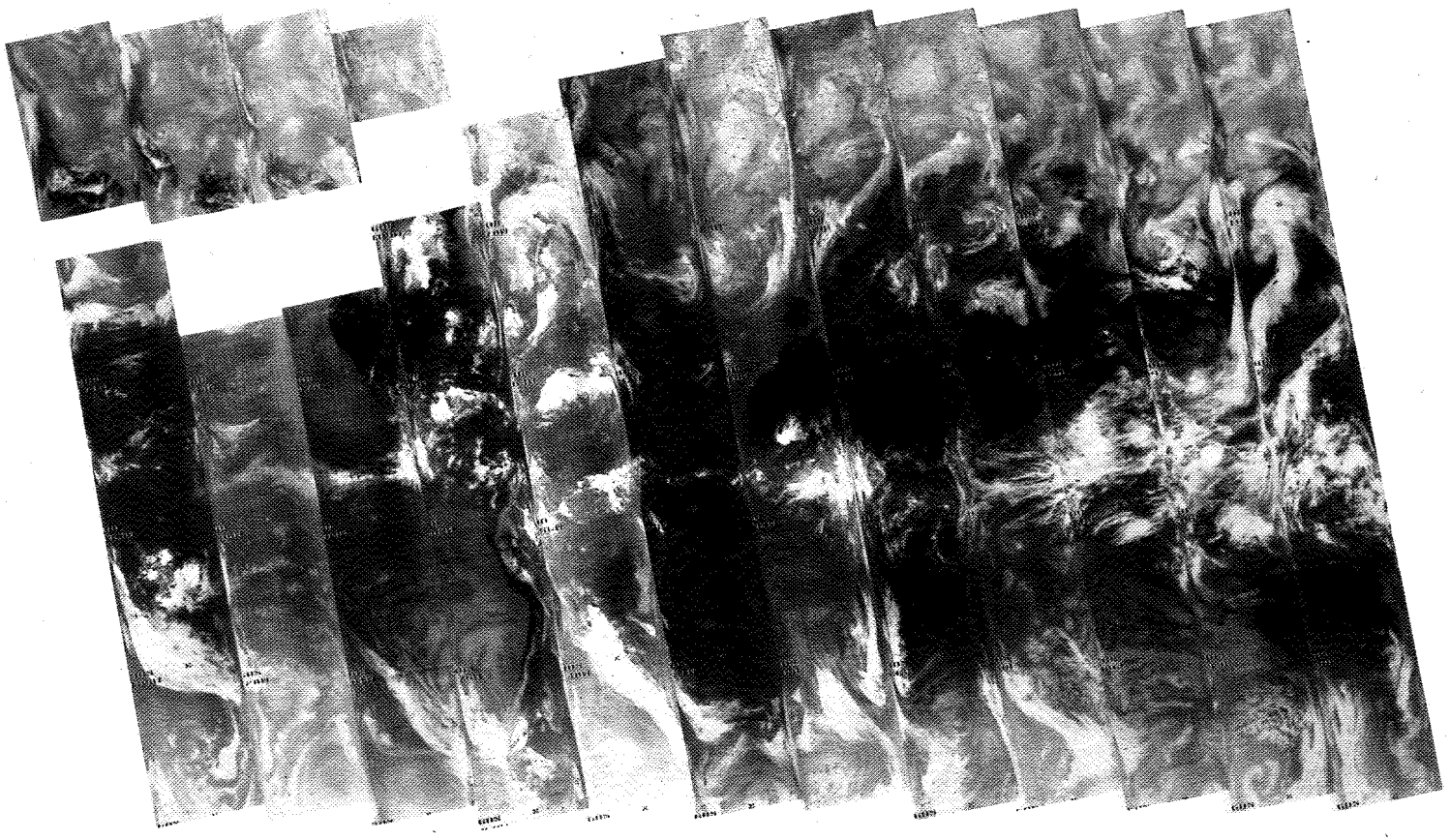
11.5 μm



2707 2706 2705 2704 2703 2702 2701 2700 2699 2698 2697 2696 2695

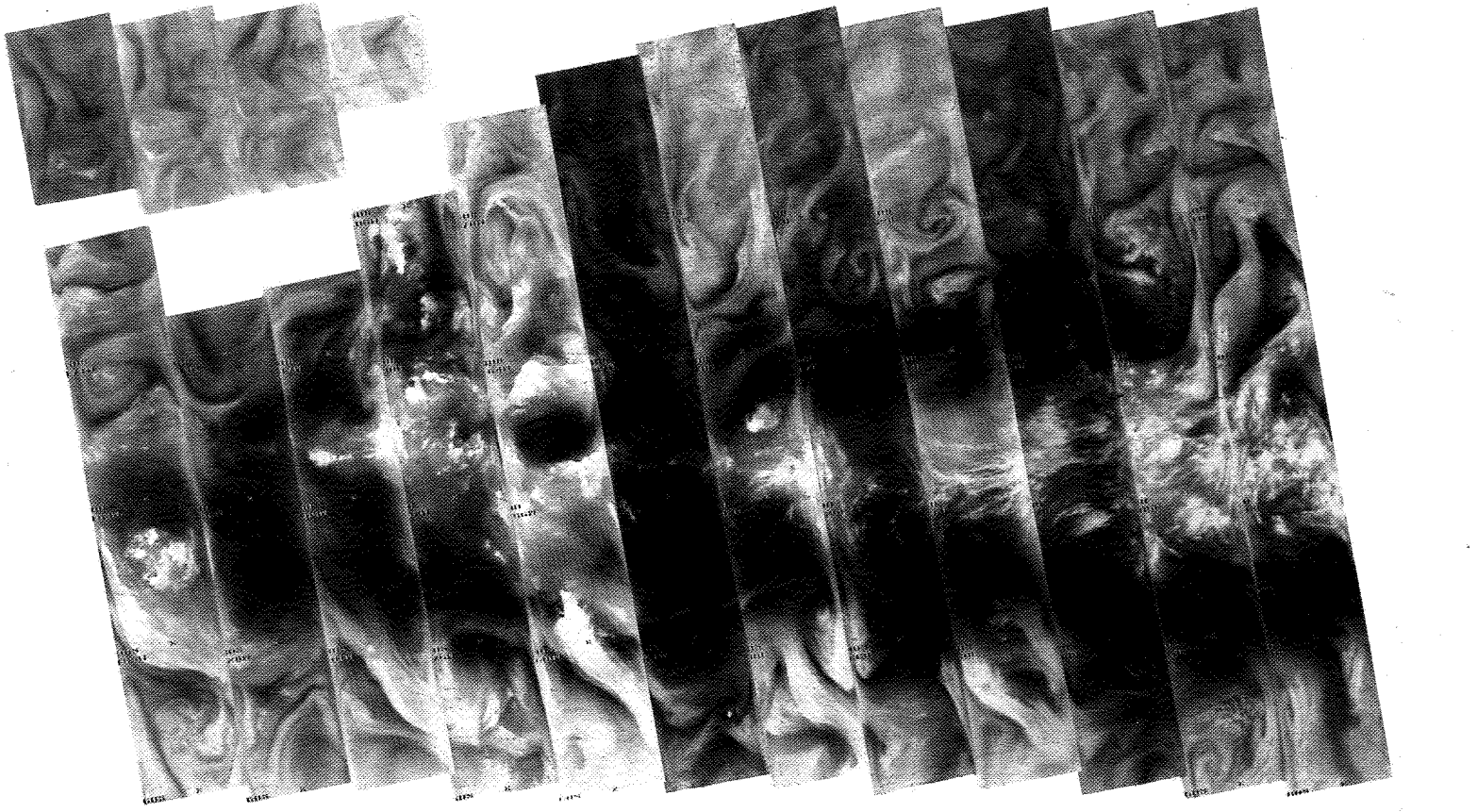
30 JUNE 1973

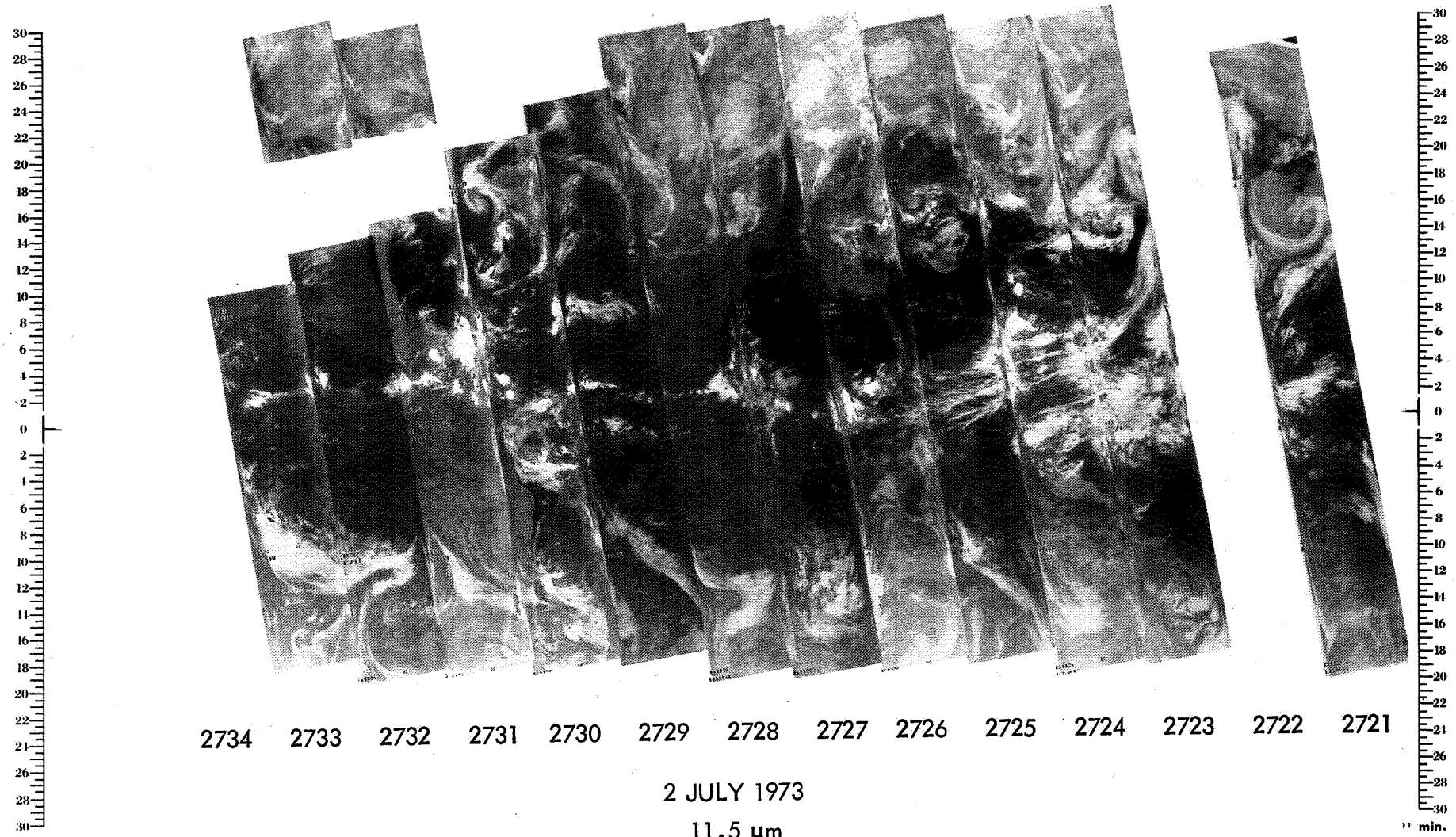
6.7 μm

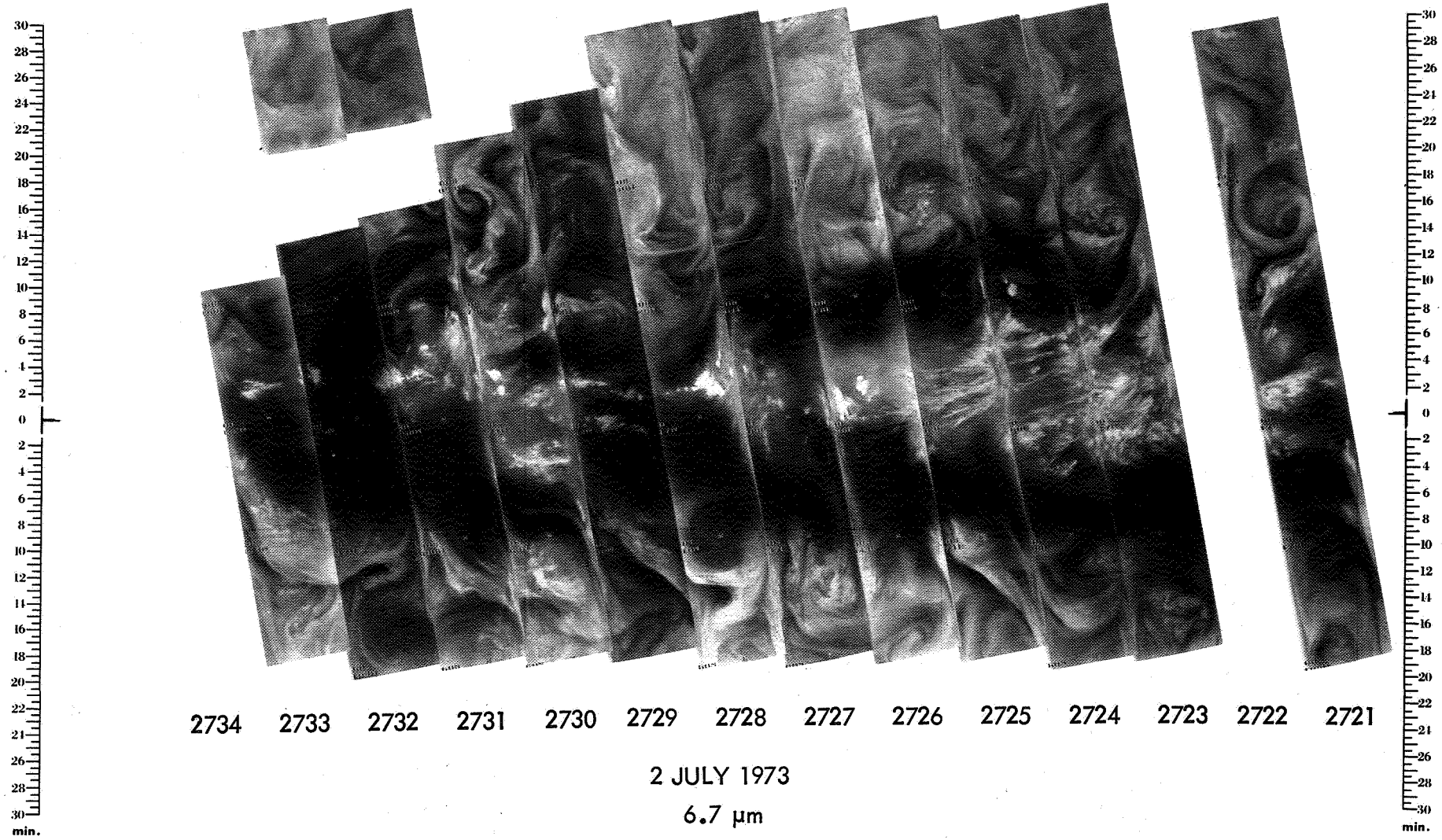


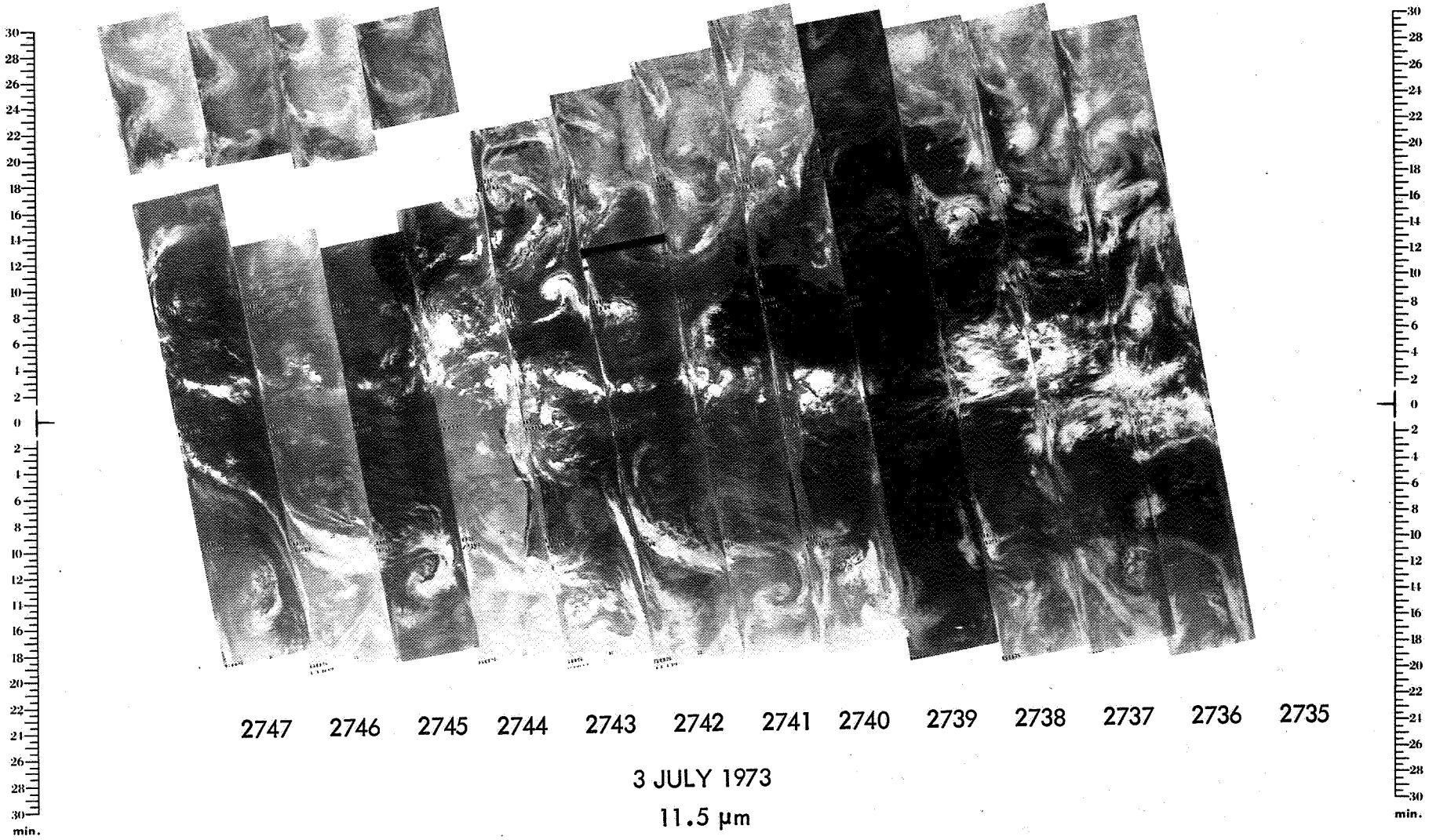
1 JULY 1973

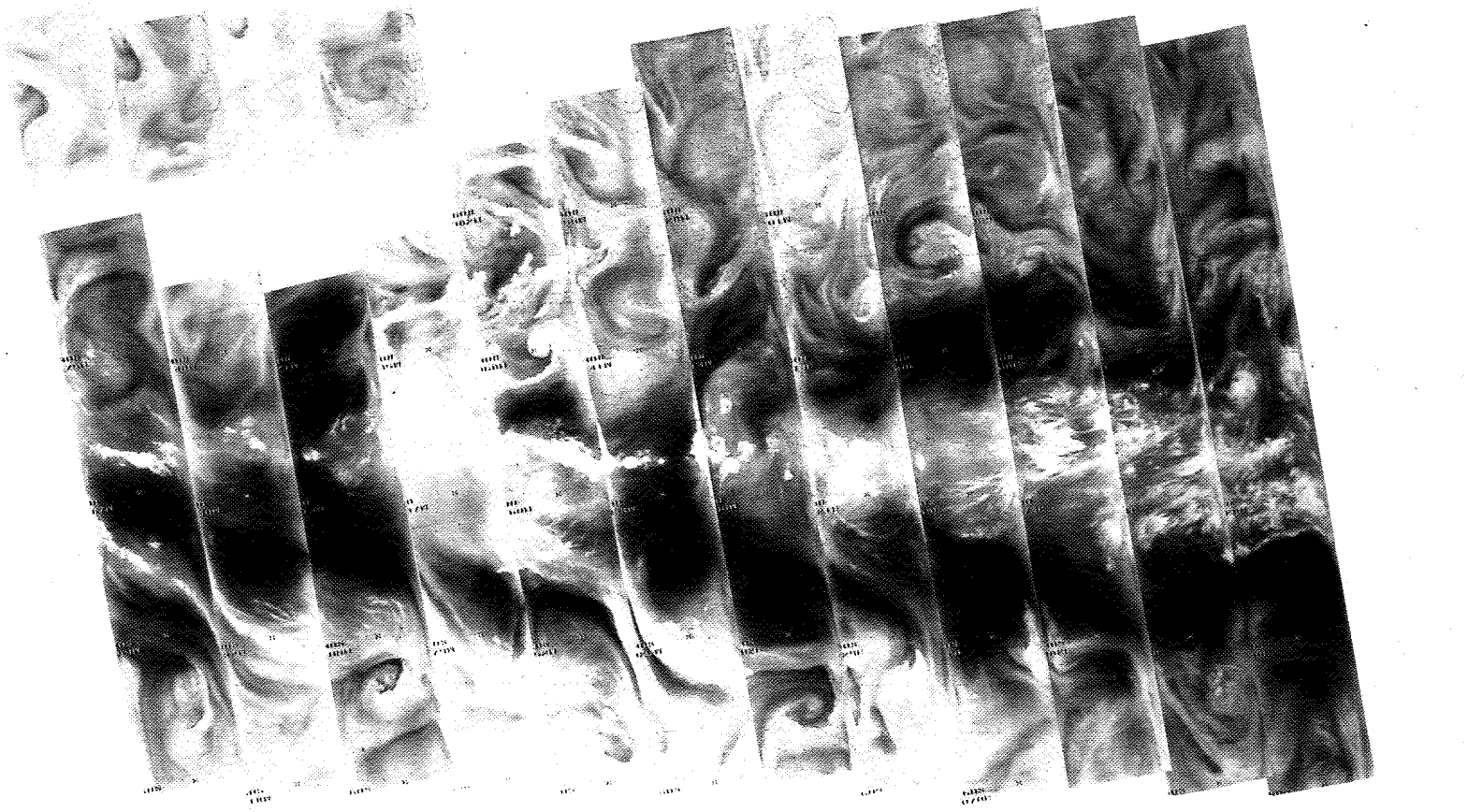
11.5 μm

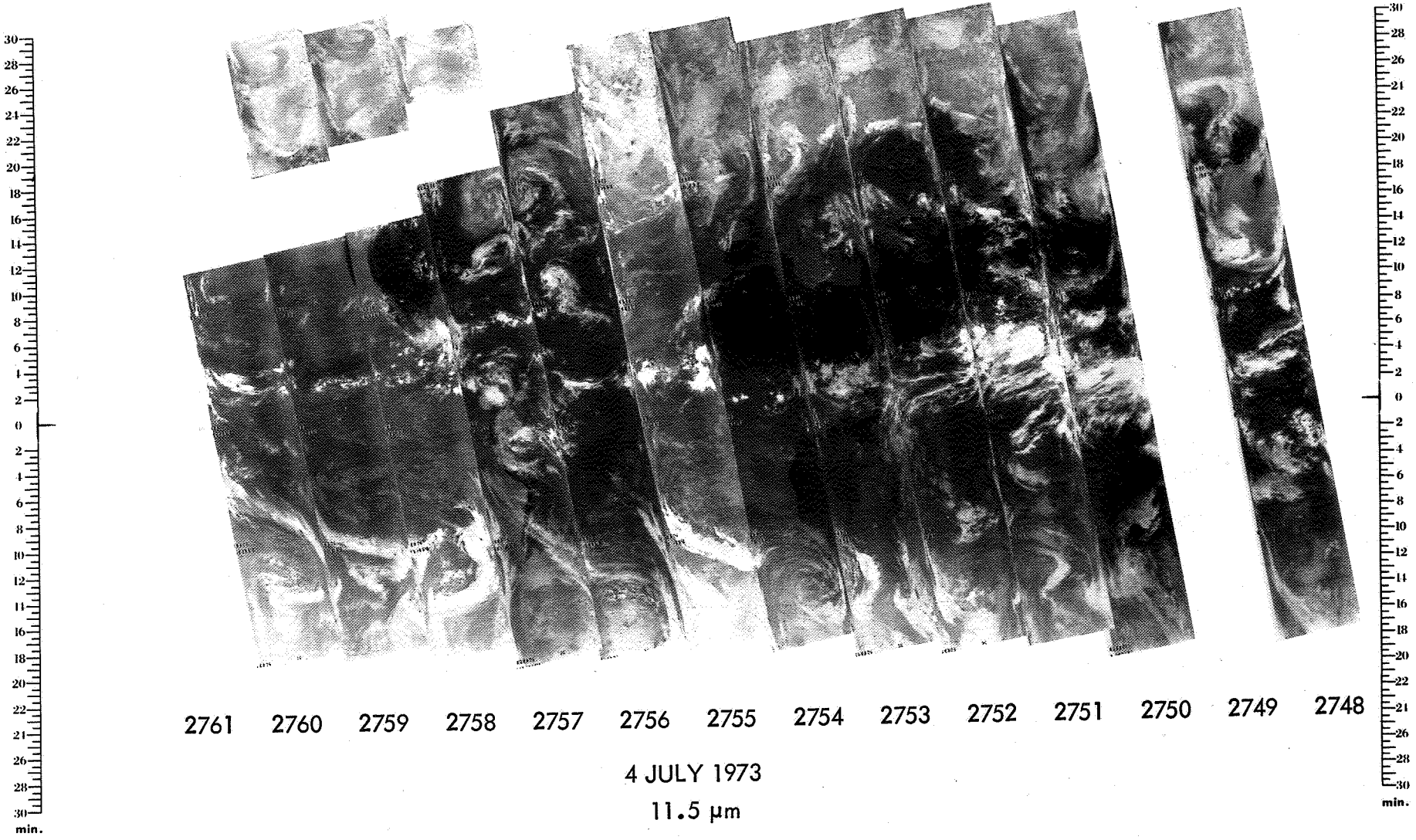

2720
2719
2718
2717
2716
2715
2714
2713
2712
2711
2710
2709
2708
1 JULY 1973
6.7 μm
min.
min.

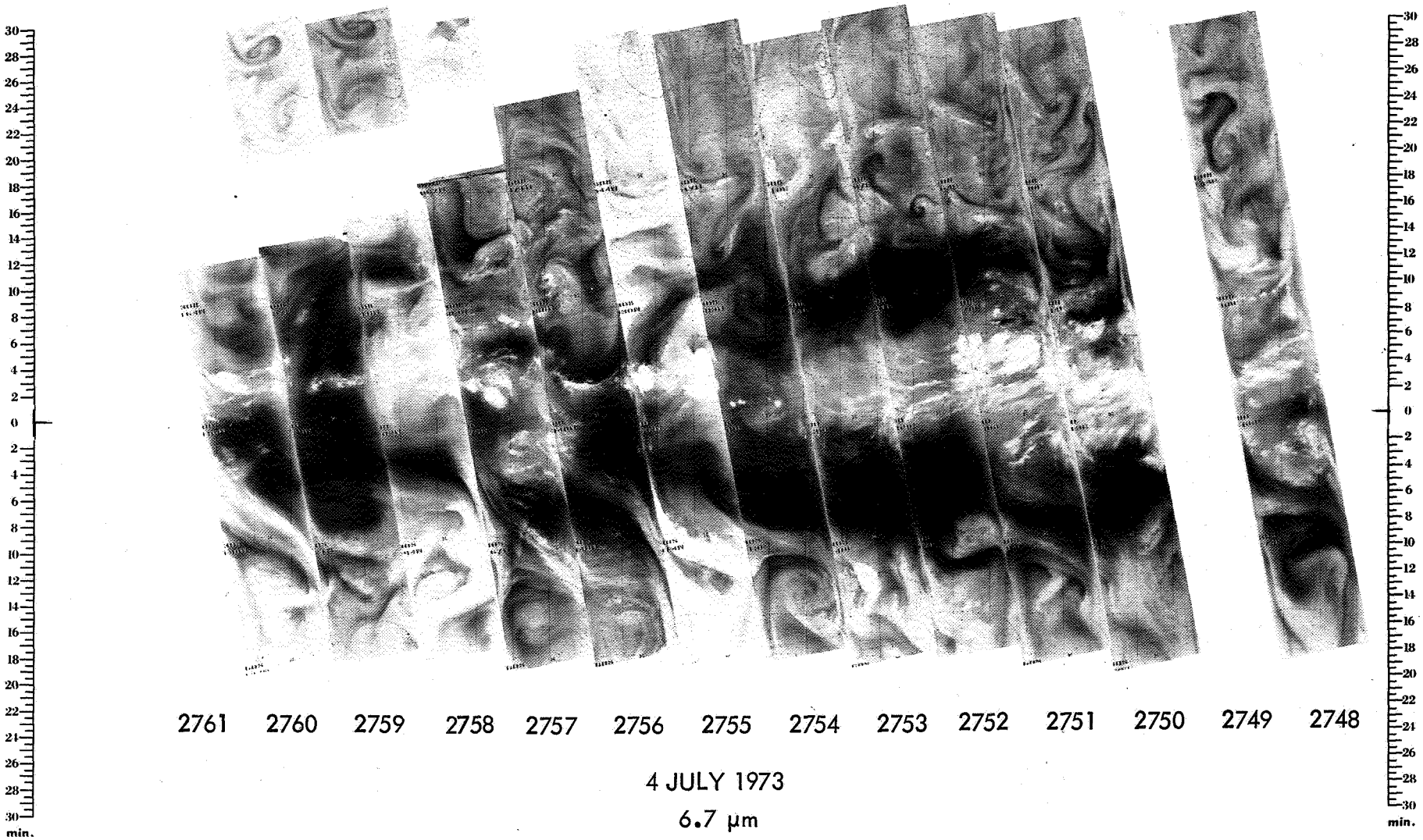

2734
2733
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2723
2722
2721
2 JULY 1973
11.5 μm
min.
min.

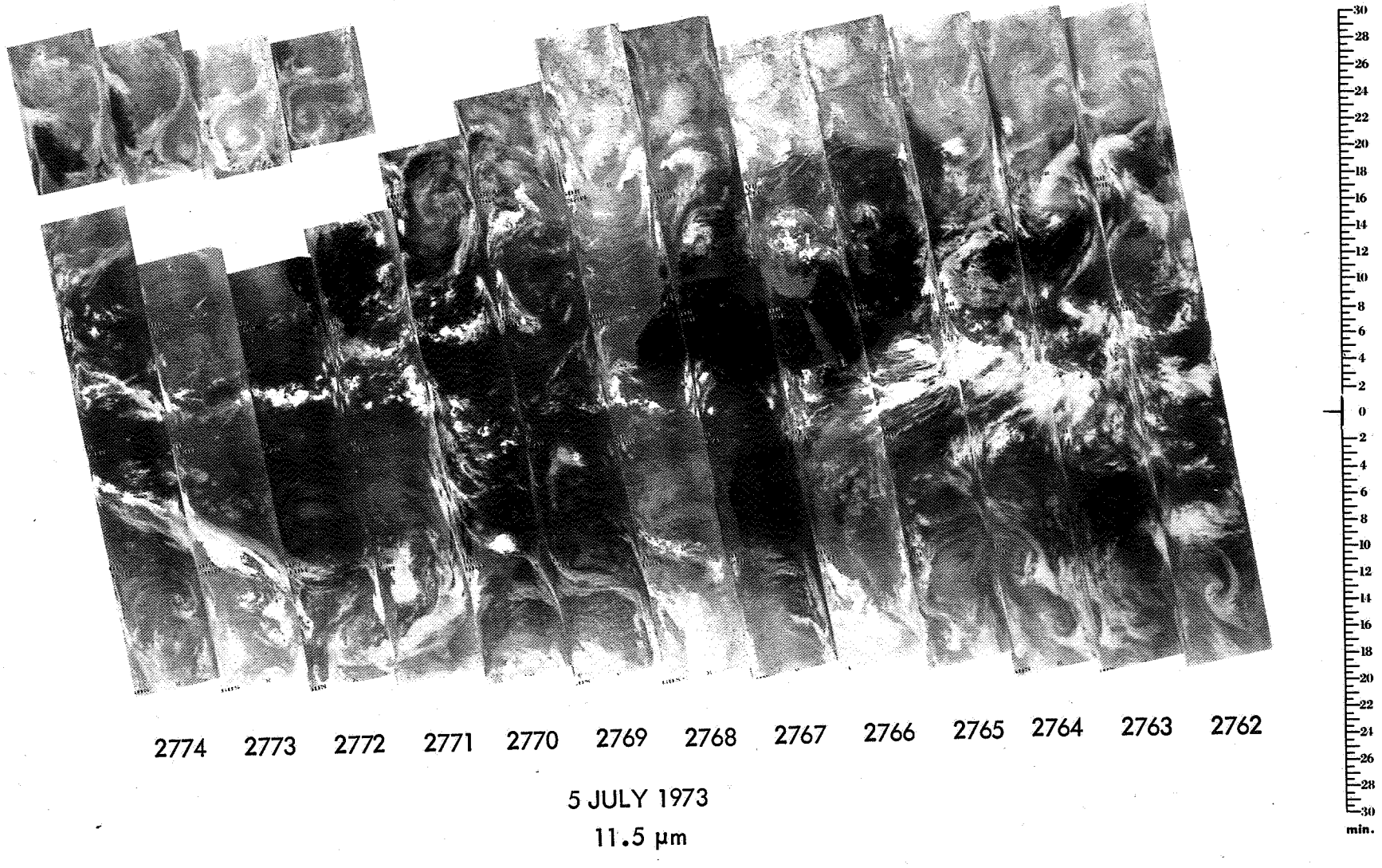

2734
2733
2732
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2726
2725
2724
2723
2722
2721
2 JULY 1973
6.7 μm
min.
min.

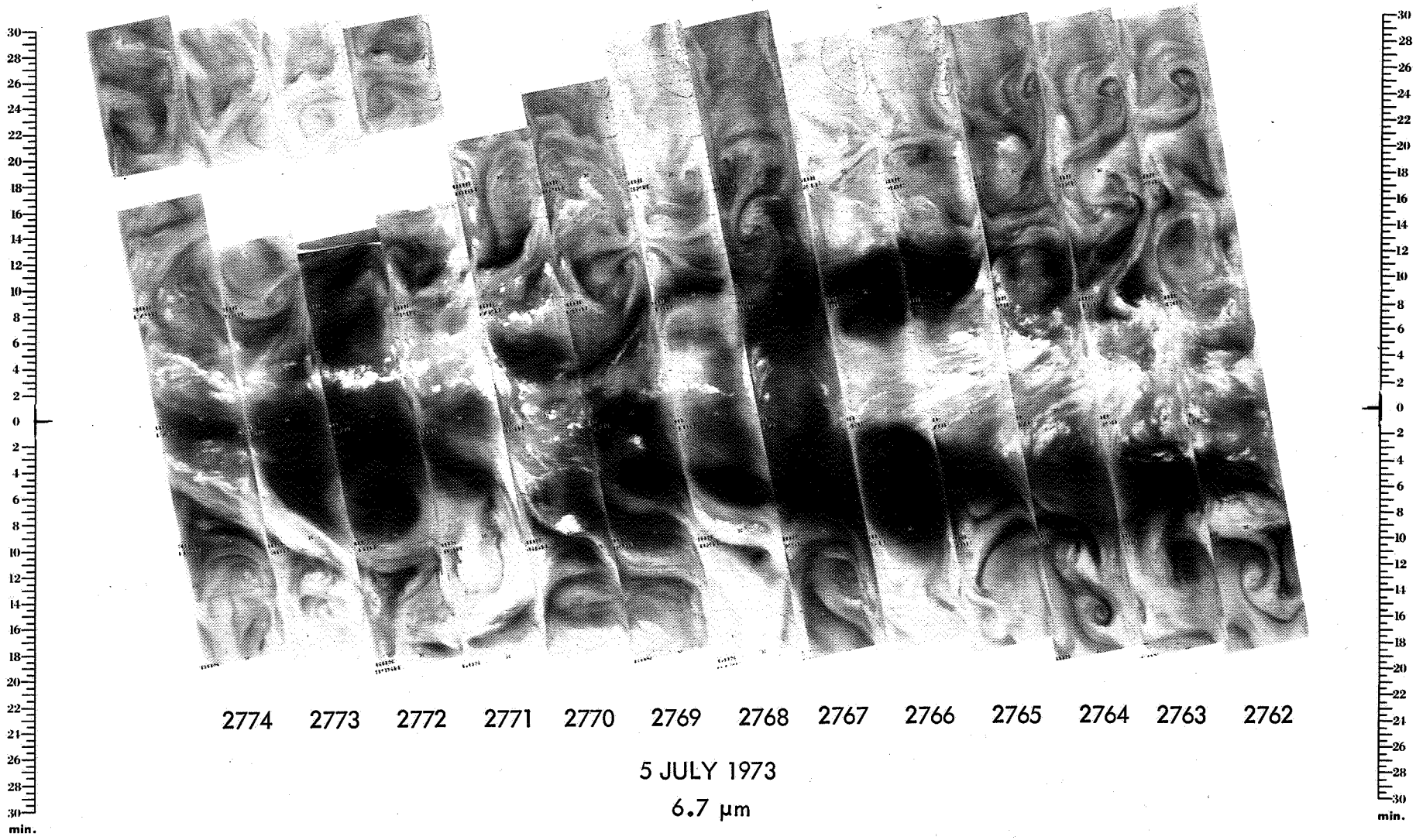

2747
2746
2745
2744
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2740
2739
2738
2737
2736
2735
3 JULY 1973
11.5 μm
min.
min.

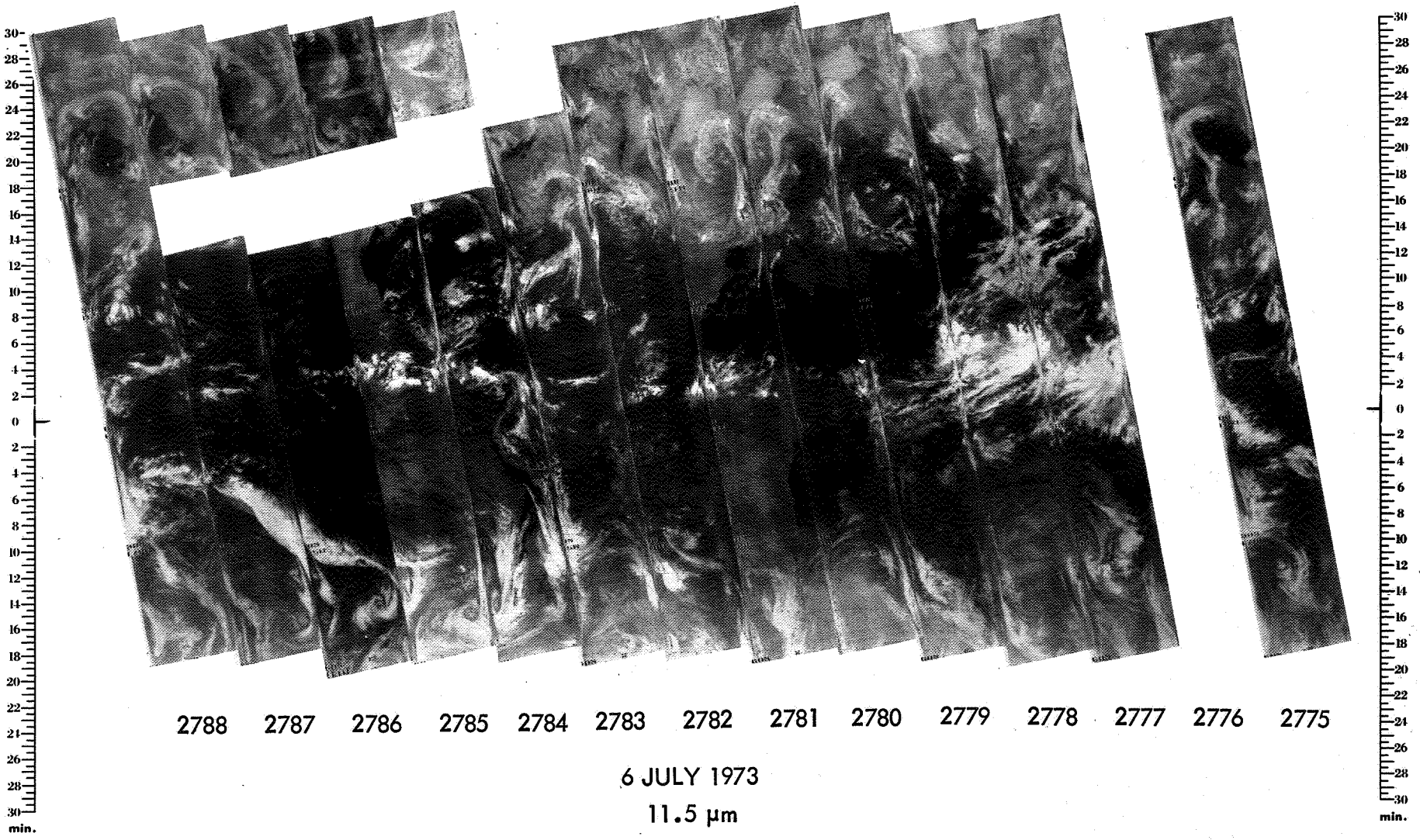

2747
2746
2745
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2741
2740
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2738
2737
2736
2735
3 JULY 1973
6.7 μm
min.
min.

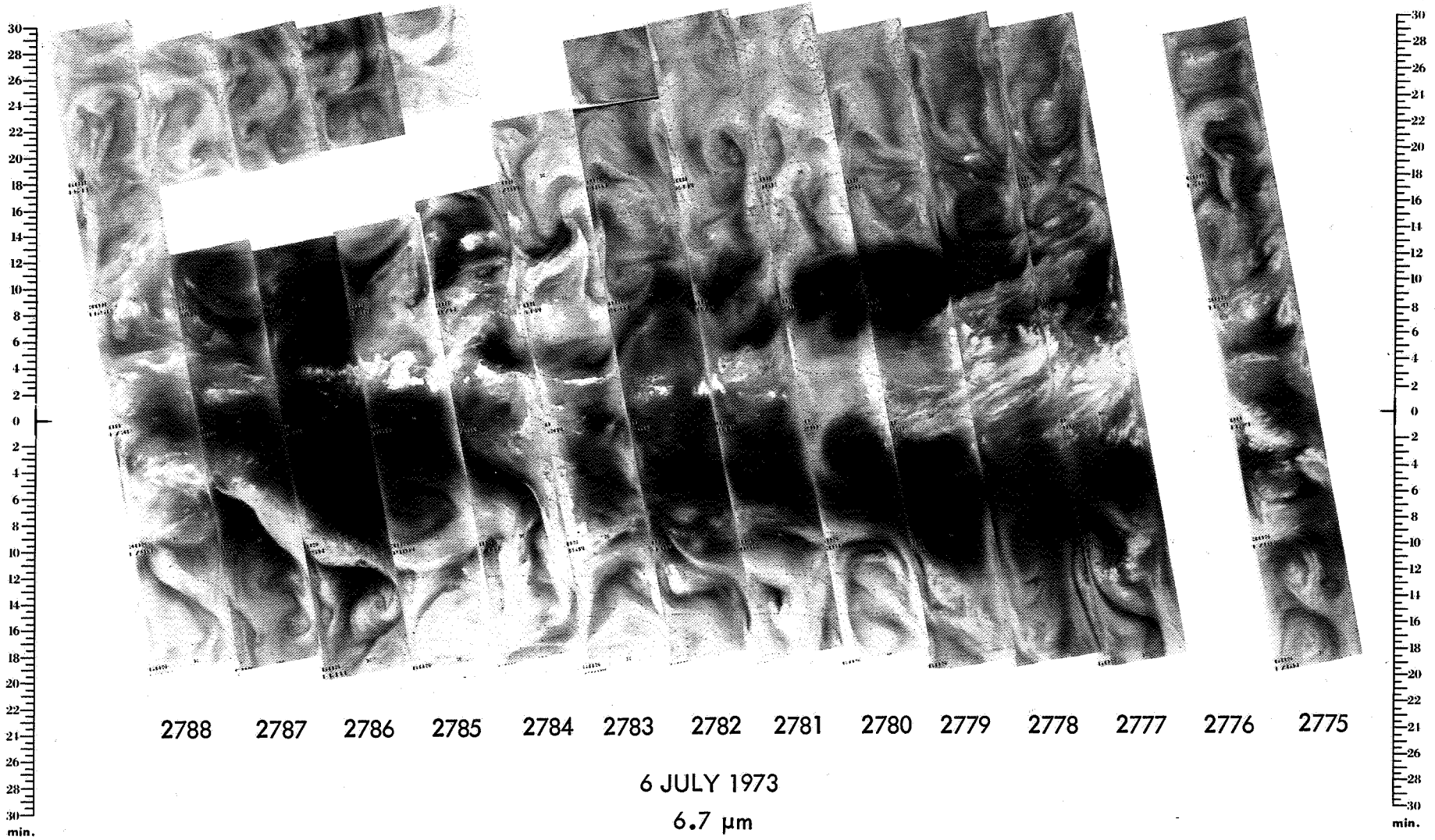

2761
2760
2759
2758
2757
2756
2755
2754
2753
2752
2751
2750
2749
2748
4 JULY 1973
11.5 μm
min.
min.


2761 2760 2759 2758 2757 2756 2755 2754 2753 2752 2751 2750 2749 2748
4 JULY 1973
6.7 μm
min.
min.


2774
2773
2772
2771
2770
2769
2768
2767
2766
2765
2764
2763
2762
5 JULY 1973
11.5 μm
min.
min.


2774
2773
2772
2771
2770
2769
2768
2767
2766
2765
2764
2763
2762
5 JULY 1973
6.7 μm
min.
min.


30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
min.
2788 2787 2786 2785 2784 2783 2782 2781 2780 2779 2778 2777 2776 2775
6 JULY 1973
11.5 μm

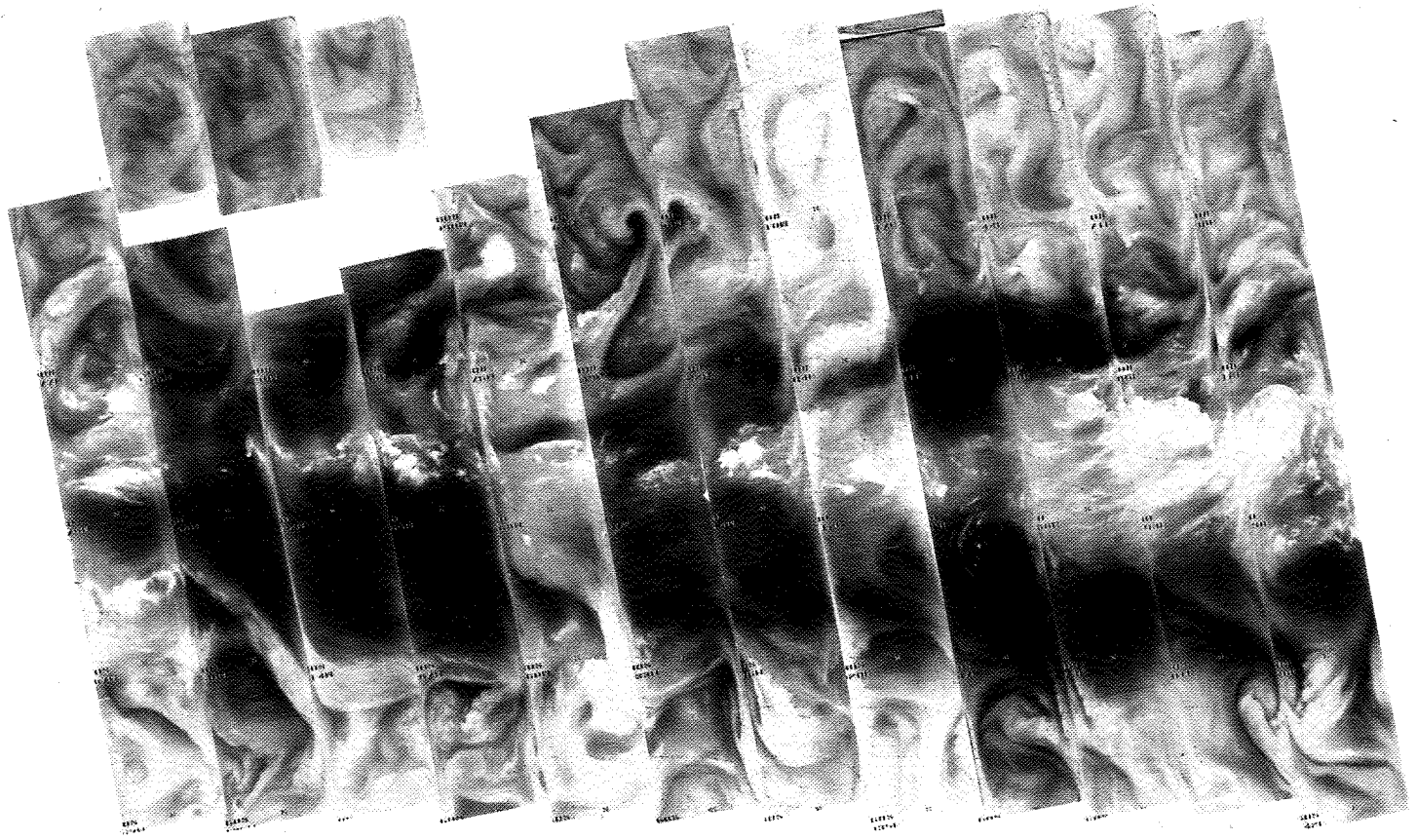

30 28 26 24 22 20 18 16 14 12 10 8 6 4 2 0 2 4 6 8 10 12 14 16 18 20 22 21 26 28 30
min.
2788 2787 2786 2785 2784 2783 2782 2781 2780 2779 2778 2777 2776 2775
6 JULY 1973
6.7 μm



2801 2800 2799 2798 2797 2796 2795 2794 2793 2792 2791 2790 2789

7 JULY 1973

11.5 μm

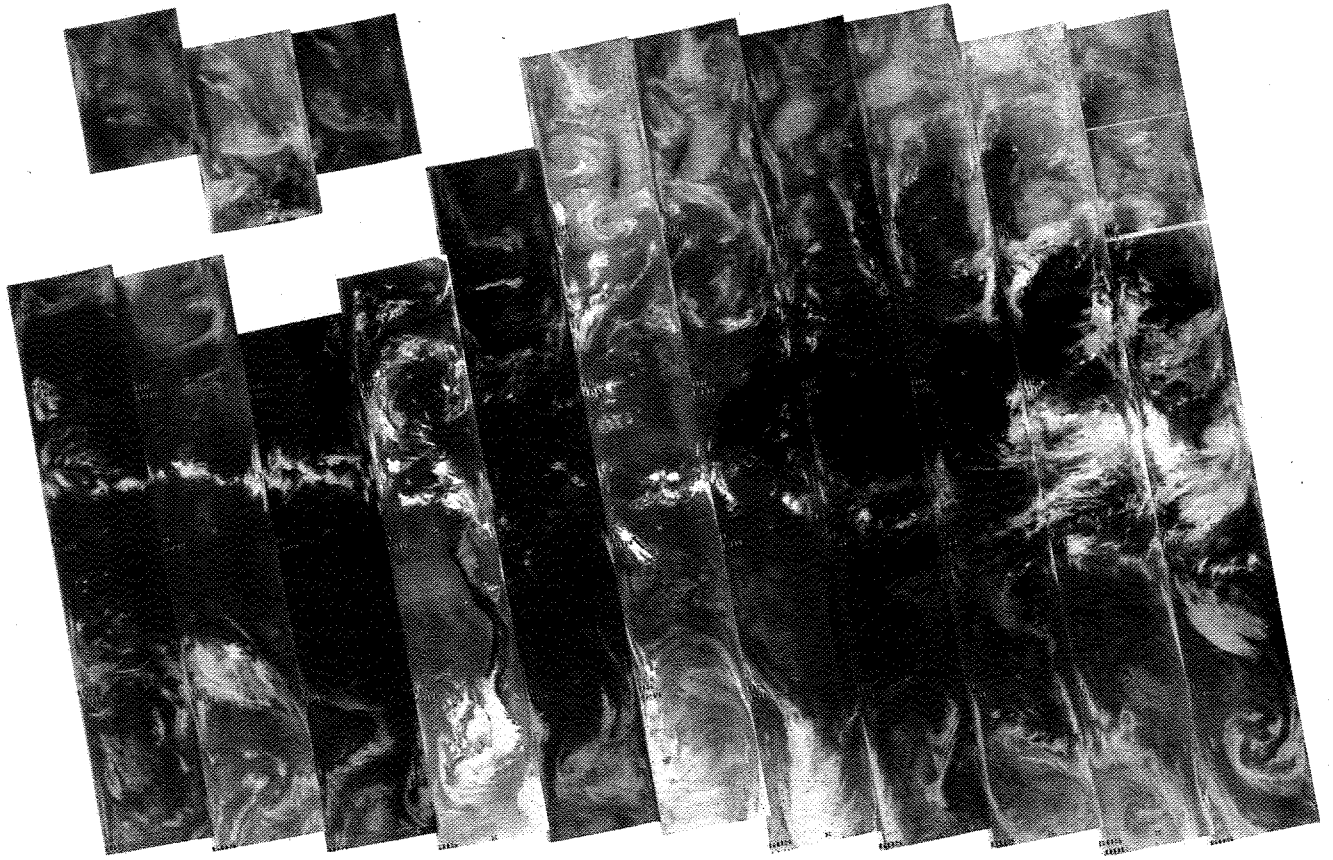


7 JULY 1973

6.7 μm

min.

min.



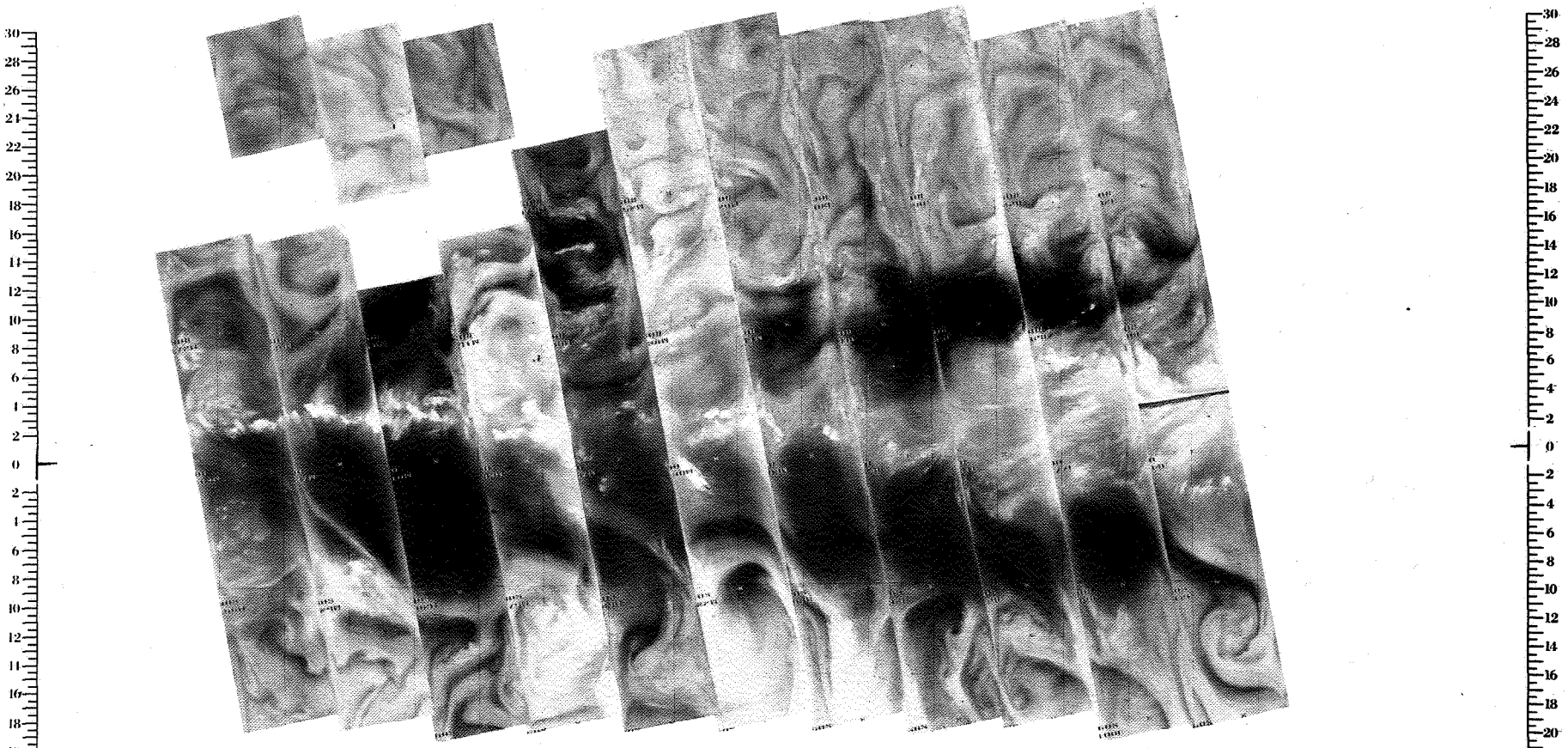
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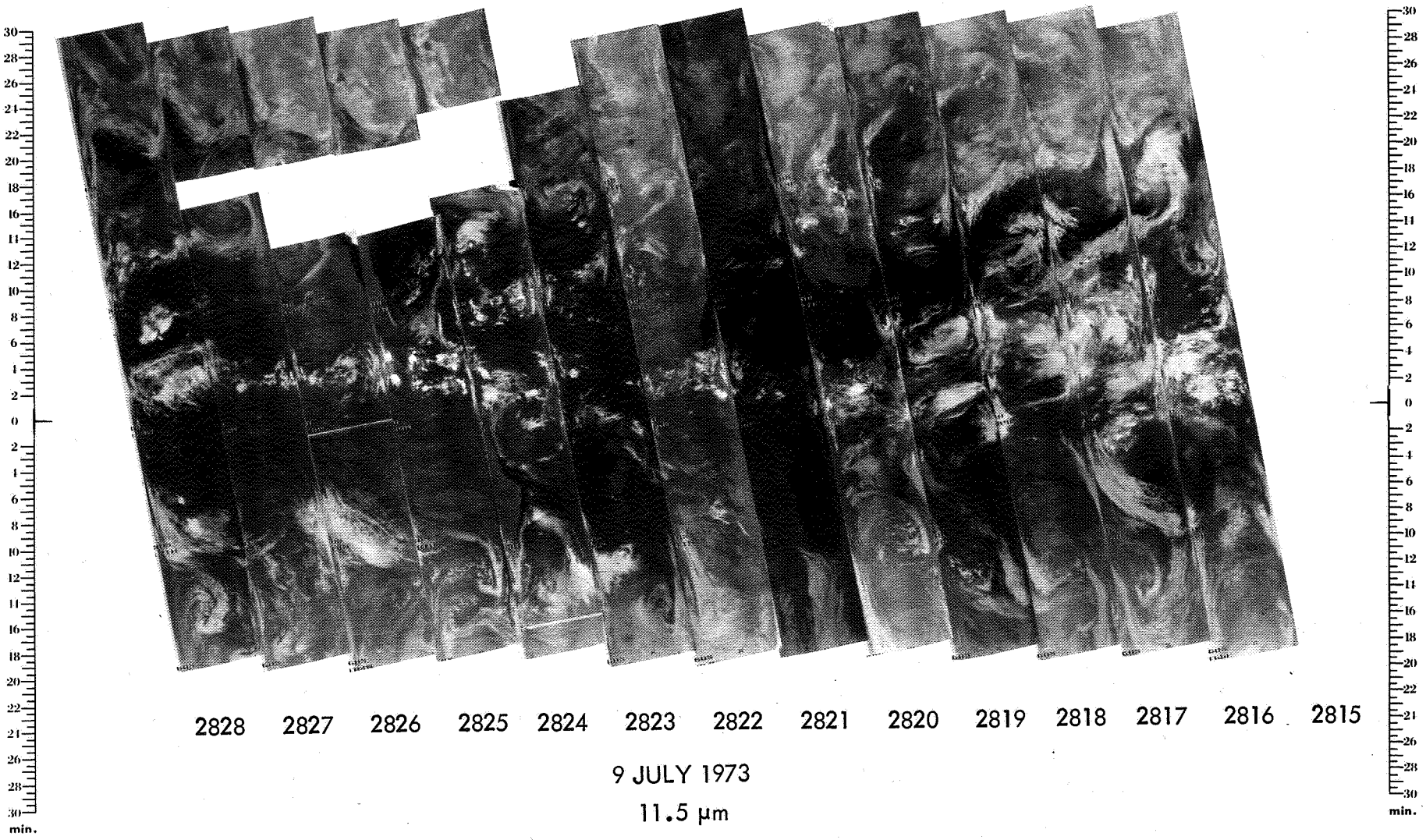
8 JULY 1973

11.5 μm

min.

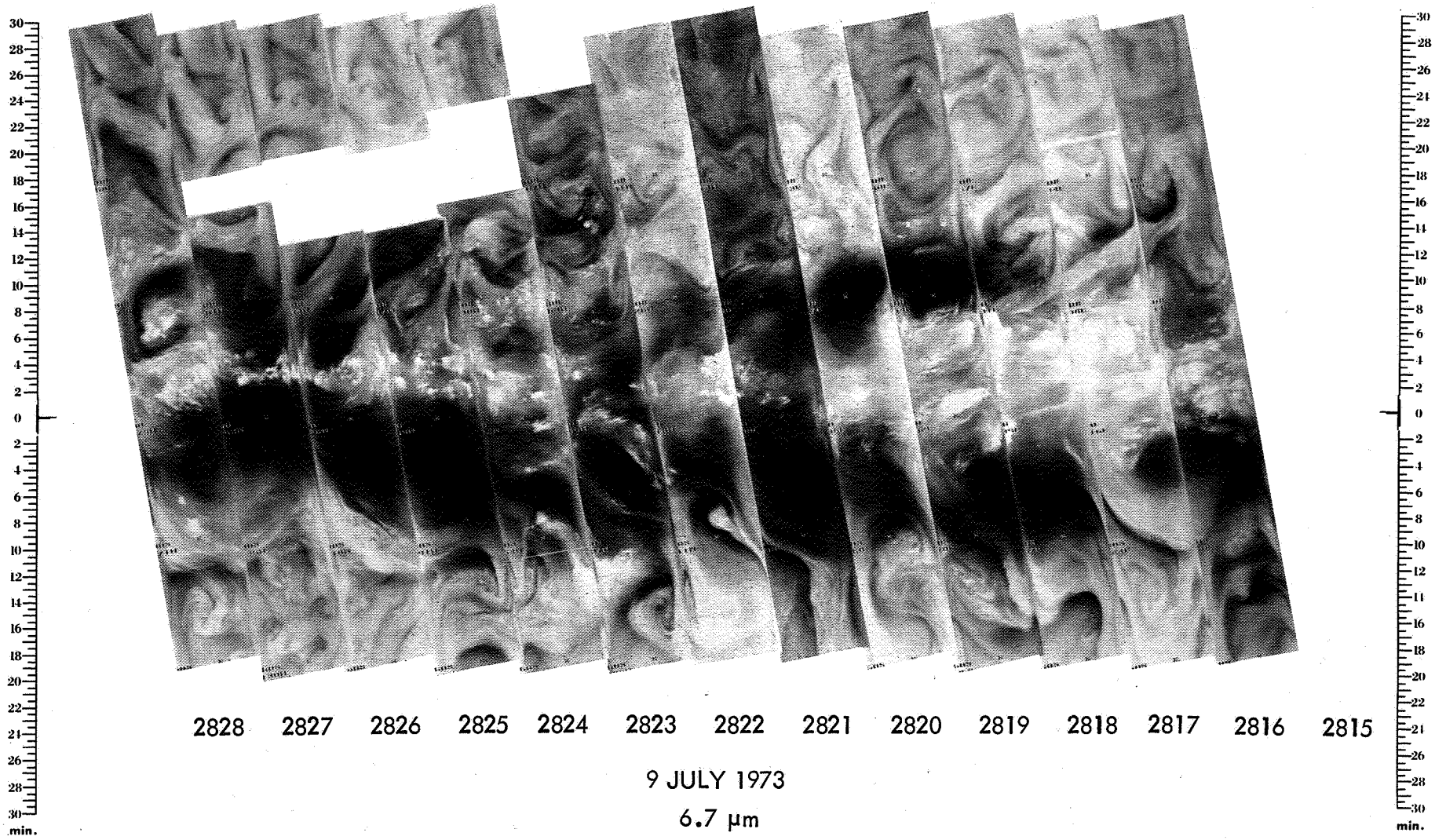
min.


2814
2813
2812
2811
2810
2809
2808
2807
2806
2805
2804
2803
2802
8 JULY 1973
6.7 μm
min.
min.



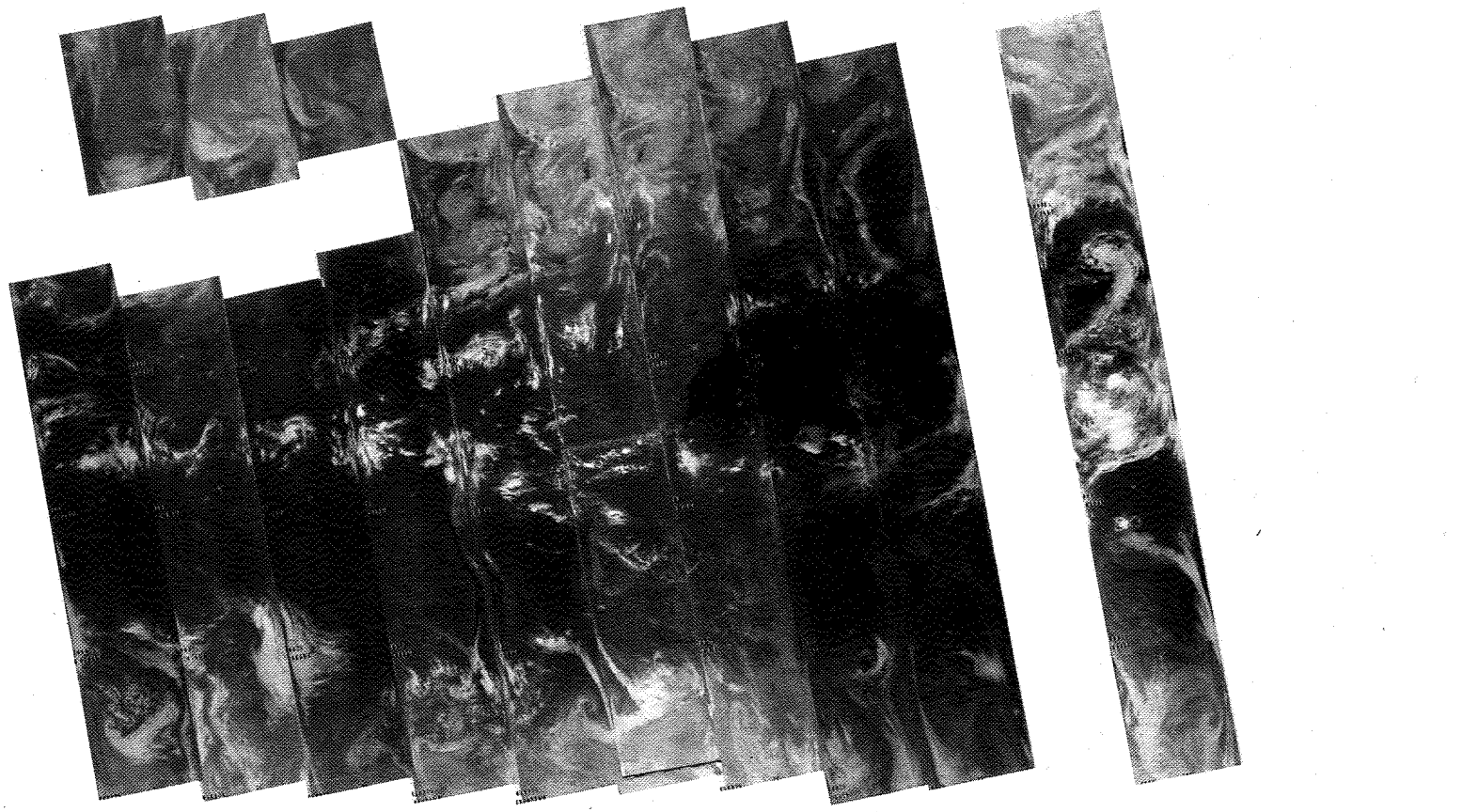
9 JULY 1973

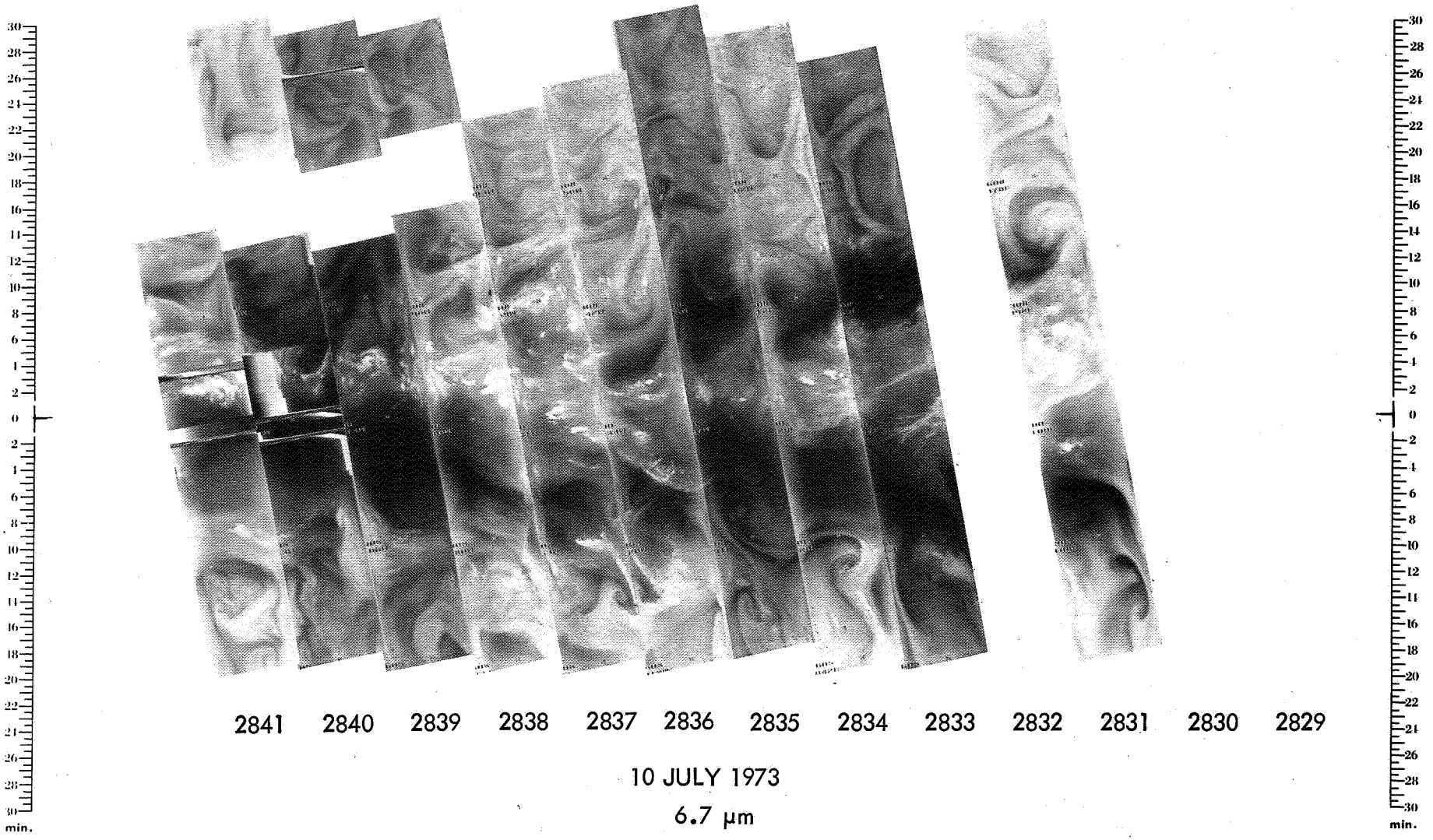
11.5 μm

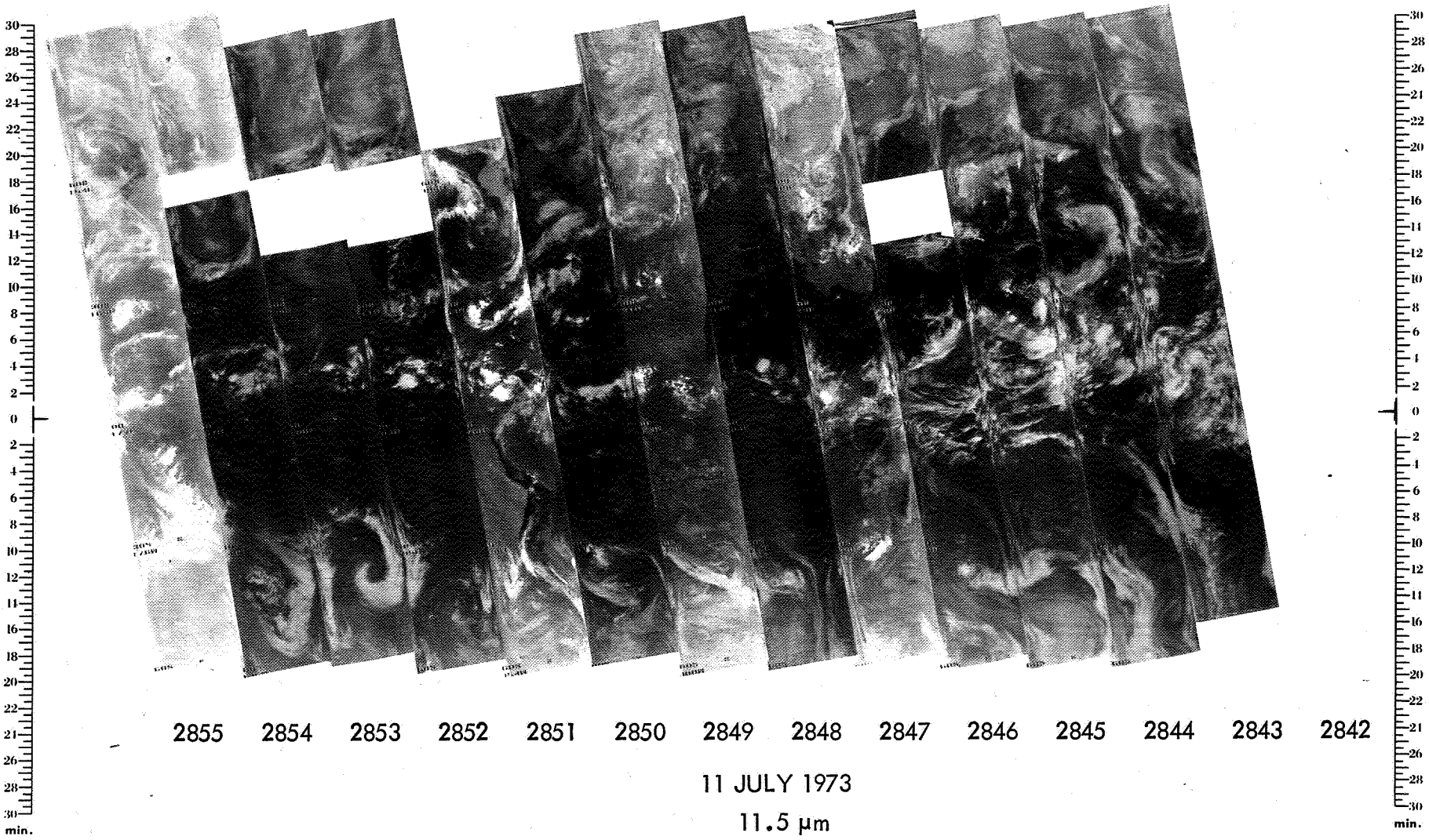


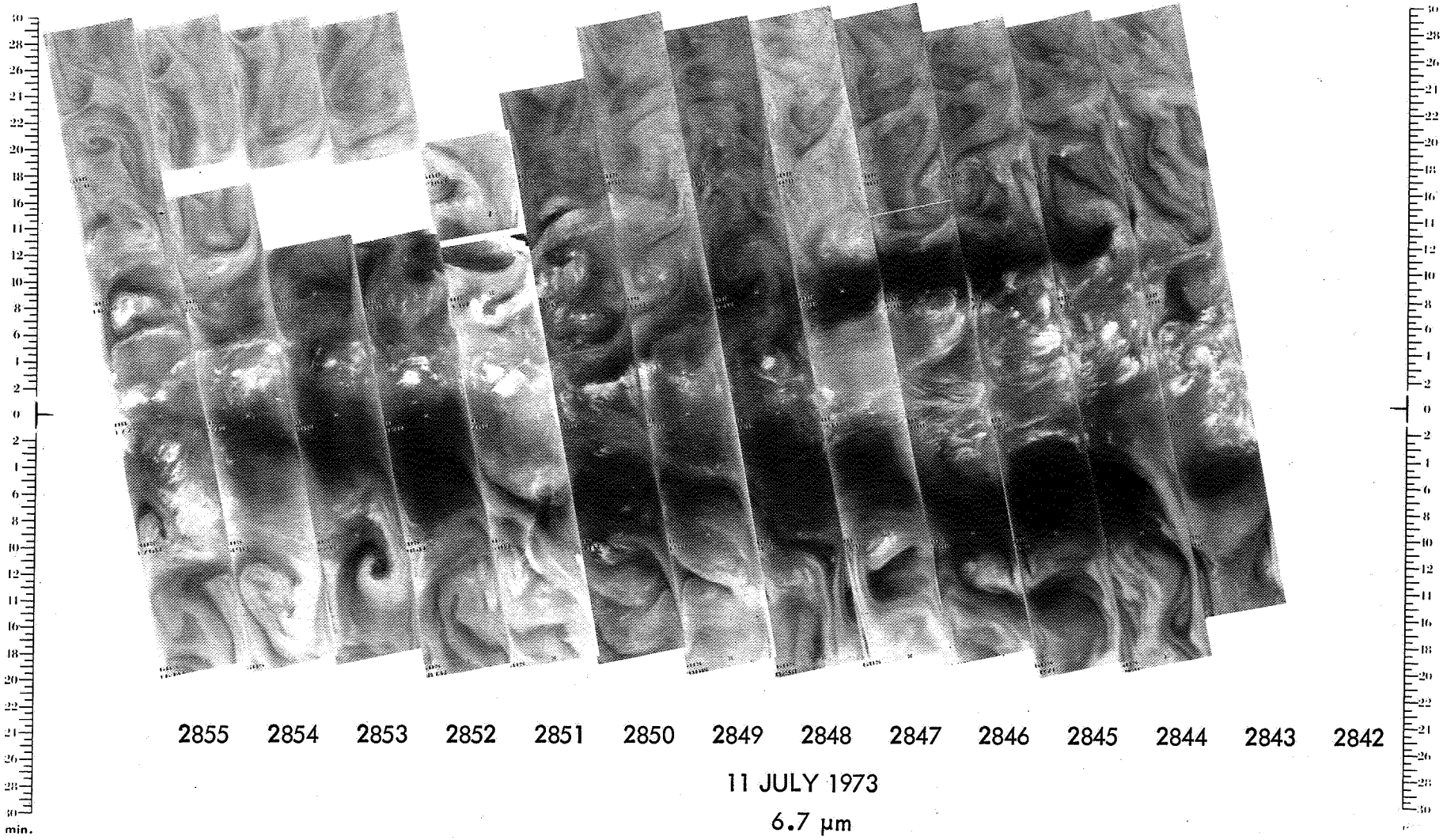
9 JULY 1973

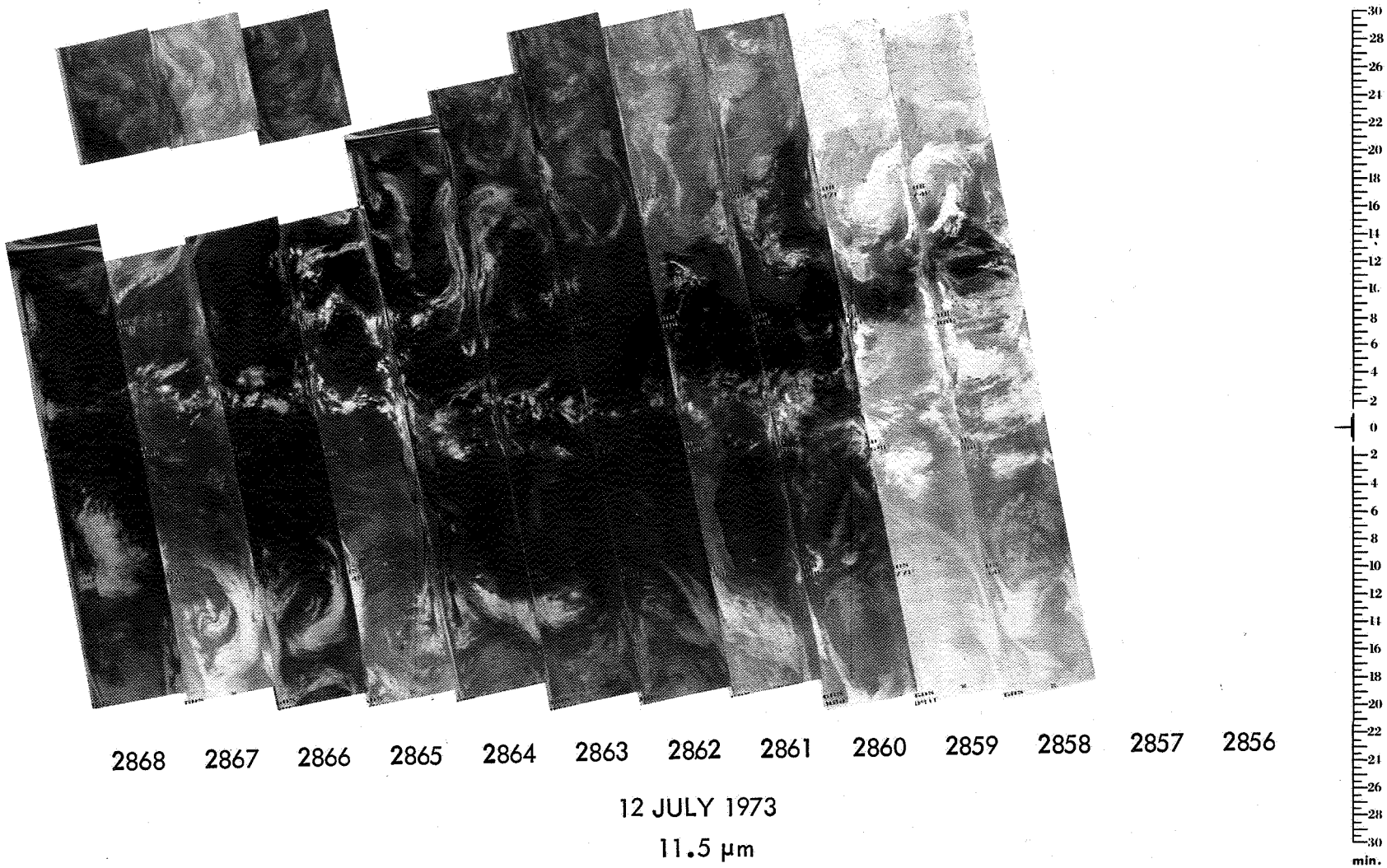
6.7 μm


2841
2840
2839
2838
2837
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2835
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2833
2832
2831
2830
2829
10 JULY 1973
11.5 μm
min.
min.

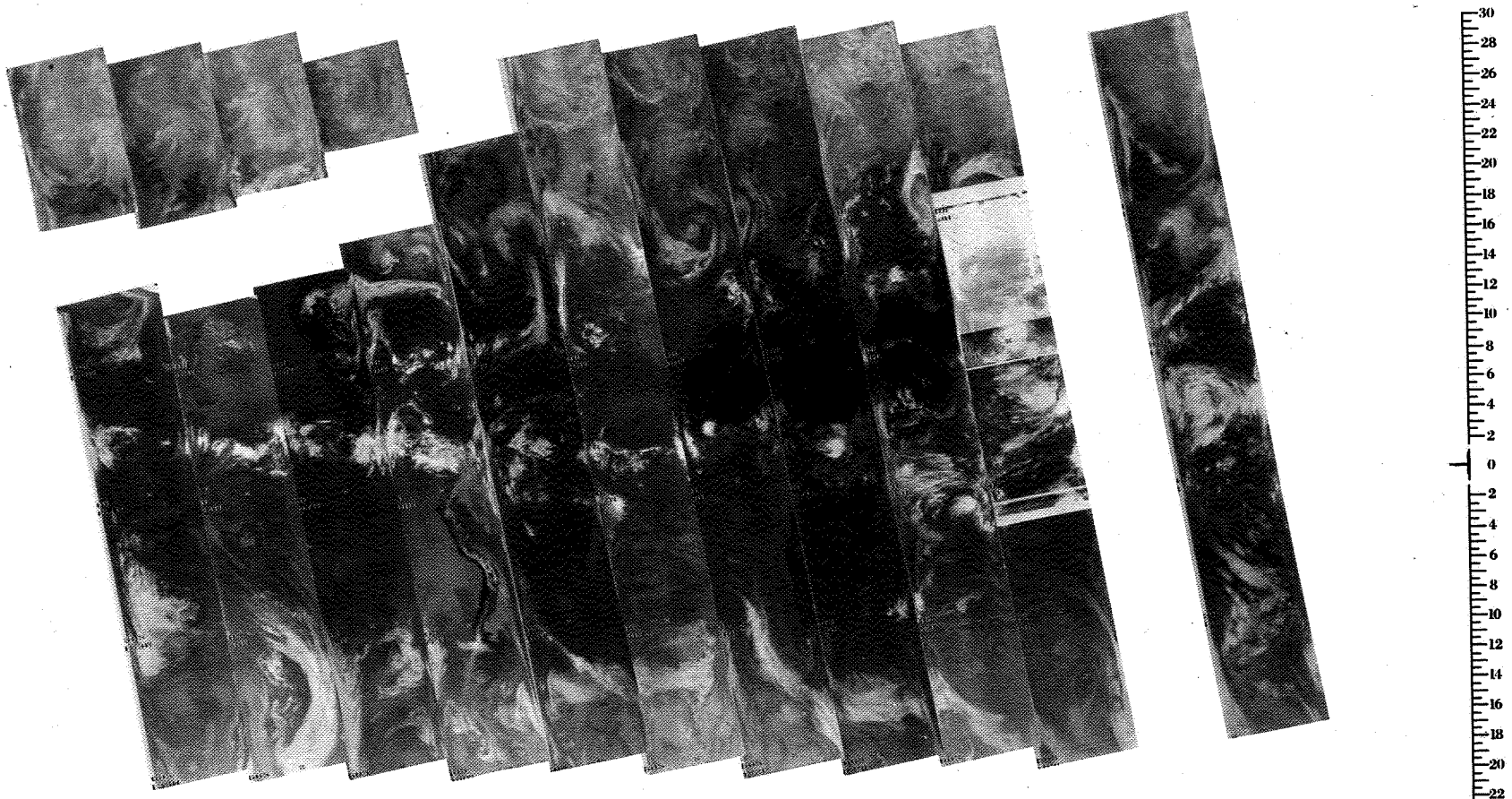

2841
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2833
2832
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2829
10 JULY 1973
6.7 μm
min.
min.

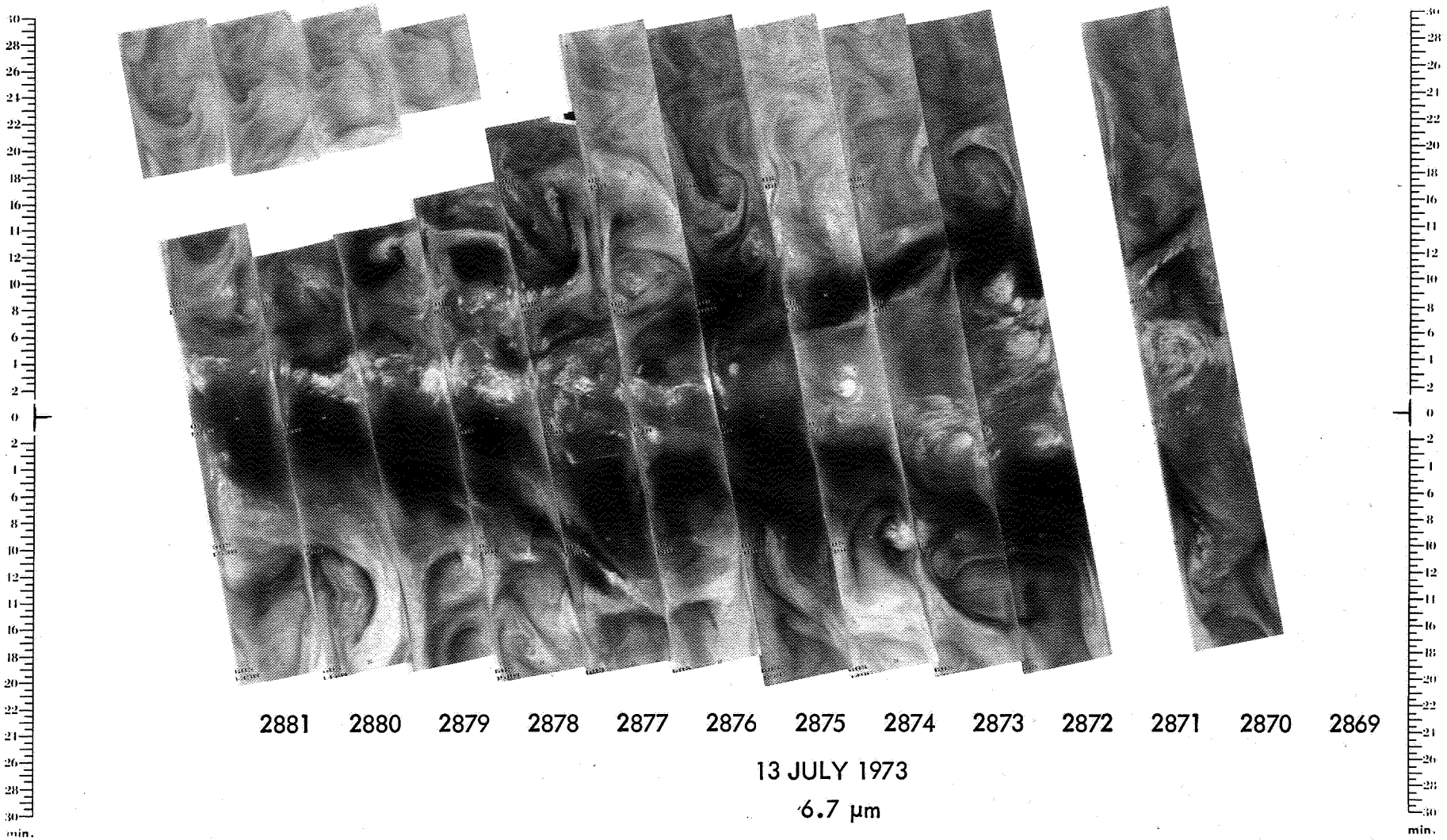

2855 2854 2853 2852 2851 2850 2849 2848 2847 2846 2845 2844 2843 2842
11 JULY 1973
11.5 μm
min.
min.

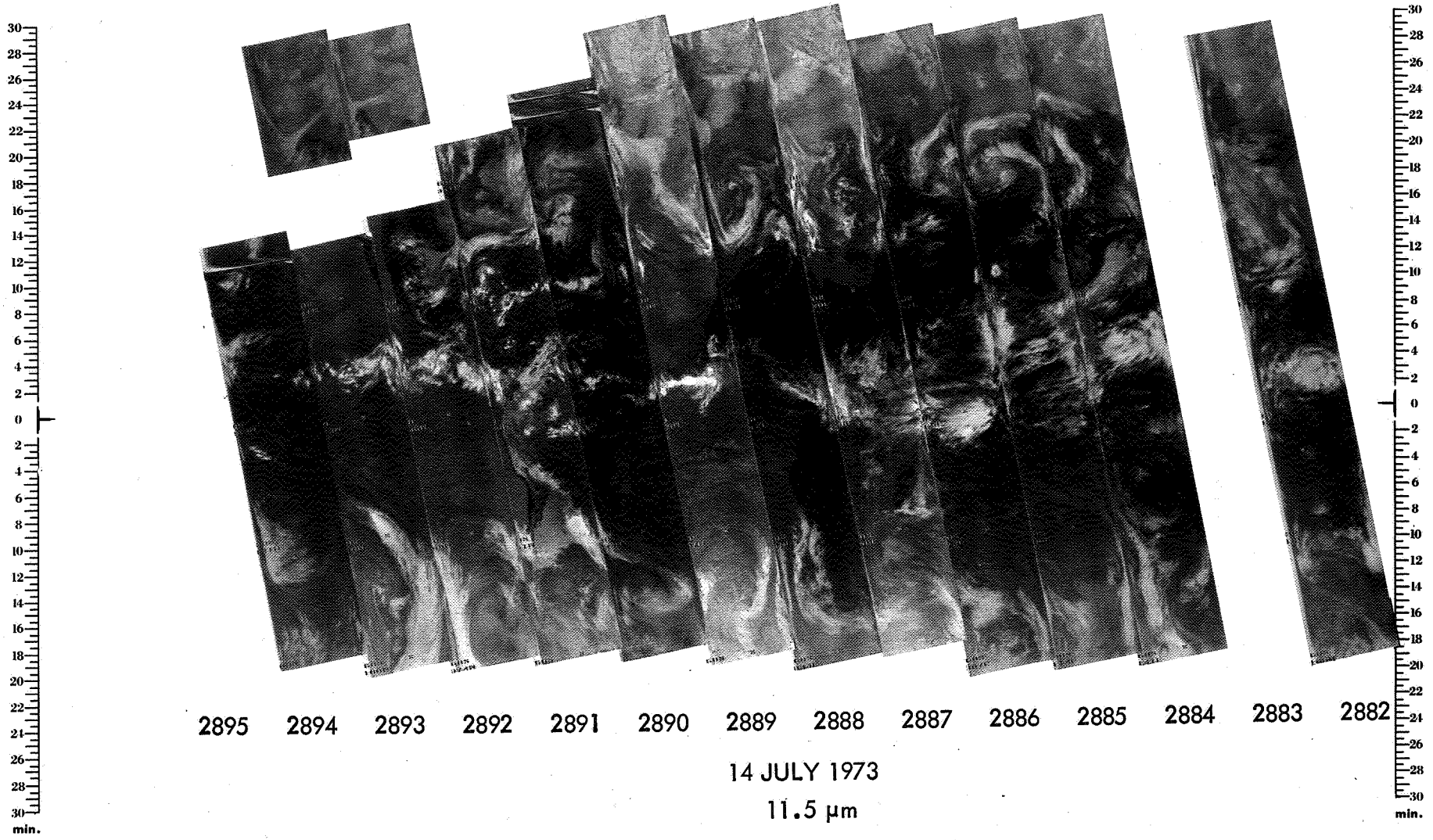

min.
2855 2854 2853 2852 2851 2850 2849 2848 2847 2846 2845 2844 2843 2842
11 JULY 1973
6.7 μm

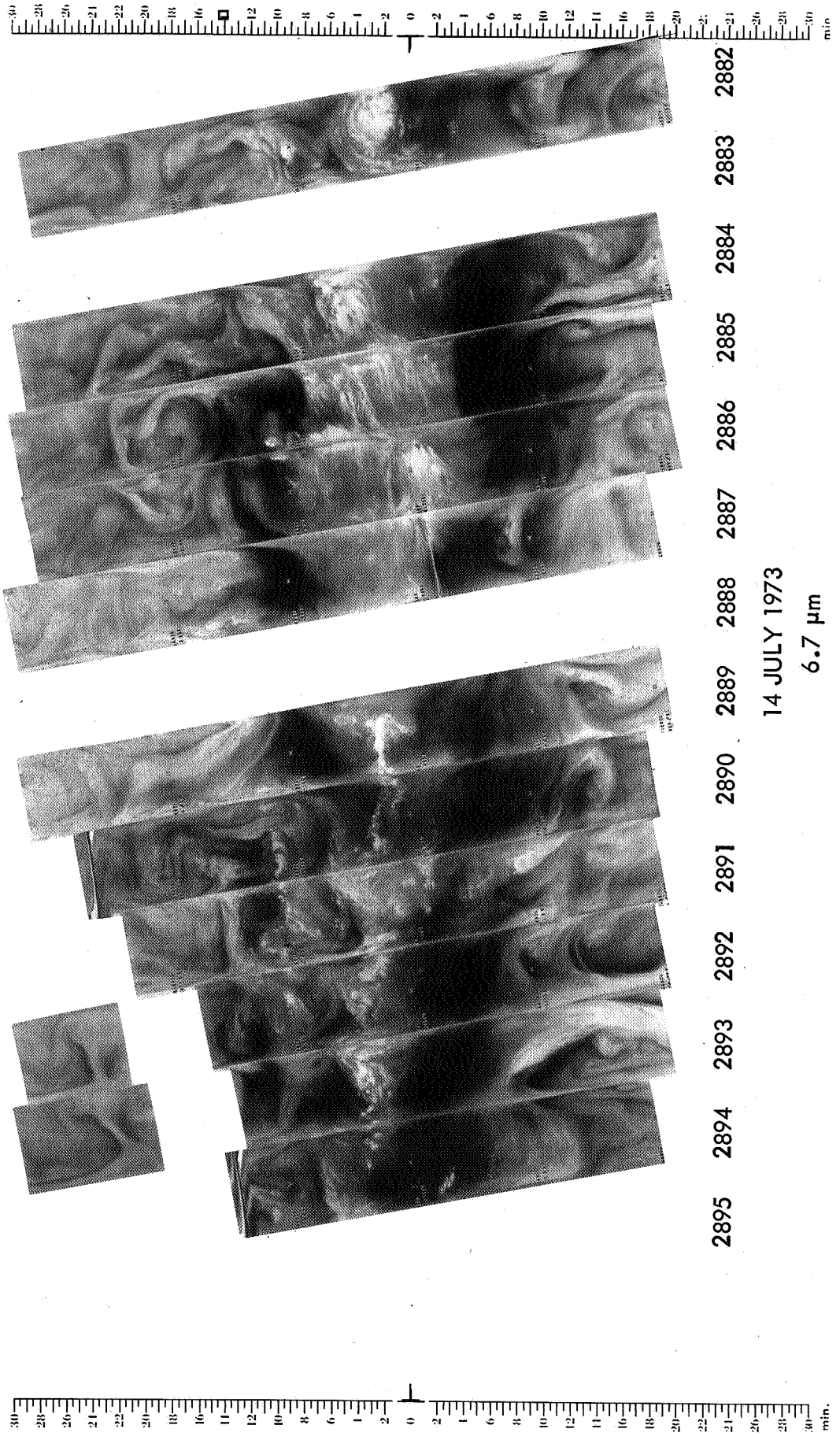

2868
2867
2866
2865
2864
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2862
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2859
2858
2857
2856
12 JULY 1973
11.5 μm
min.
min.

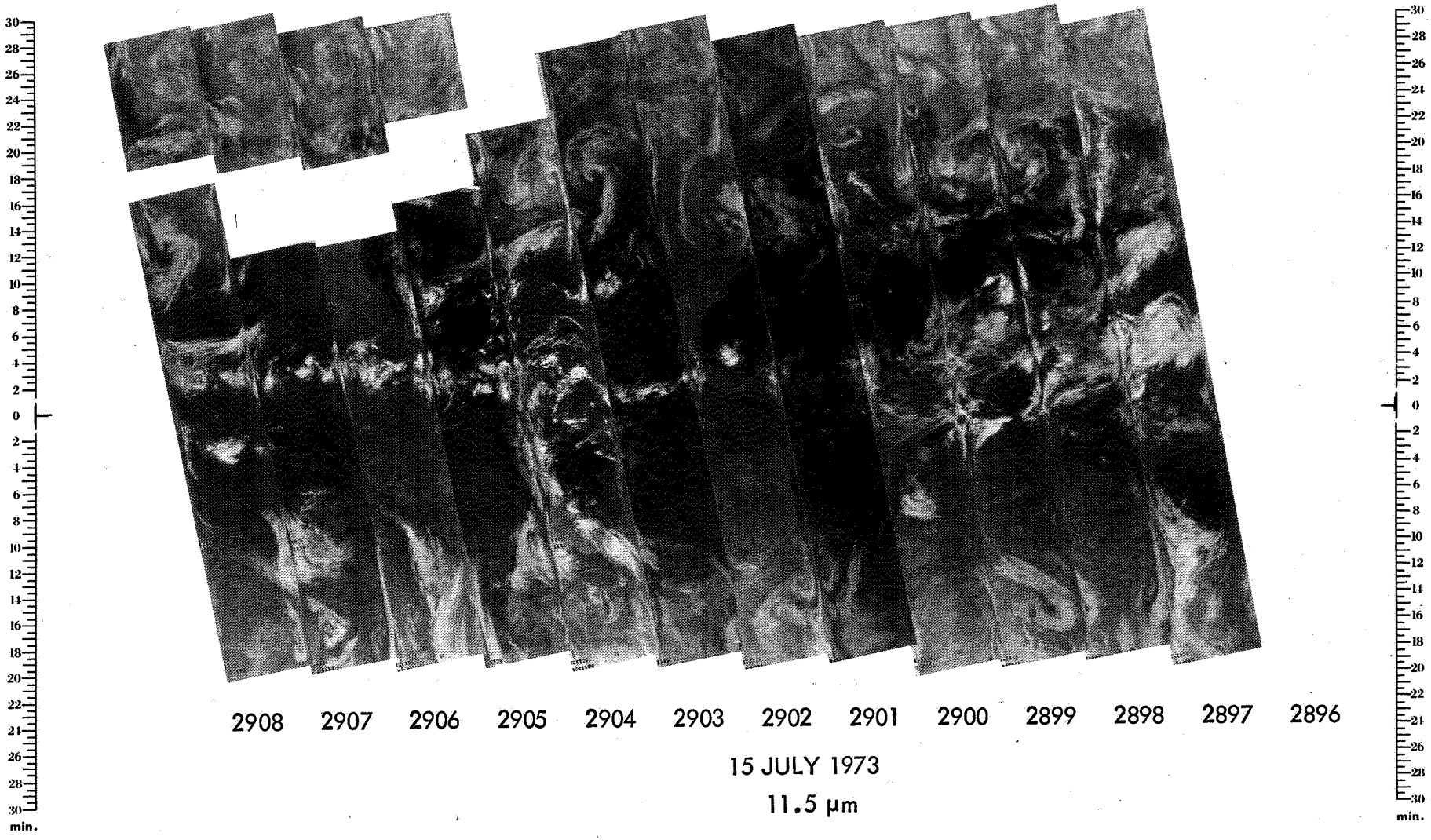
2856
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2862
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2864
2865
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2867
2868
12 JULY 1973
6.7 μm
min.

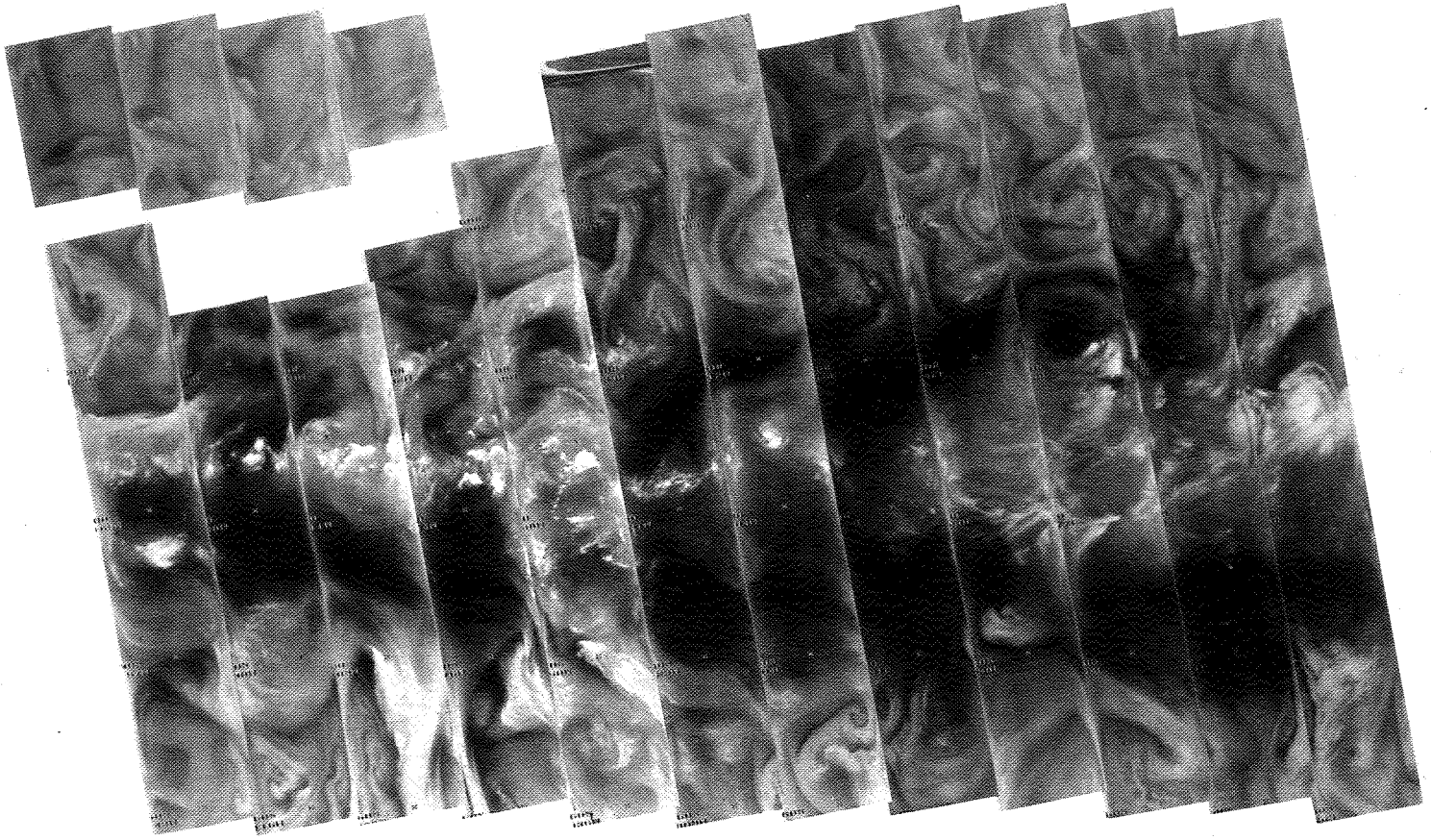

2881
2880
2879
2878
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2873
2872
2871
2870
2869
13 JULY 1973
11.5 μm
min.
min.


2881
2880
2879
2878
2877
2876
2875
2874
2873
2872
2871
2870
2869
13 JULY 1973
6.7 μm
min.
min.


2895
2894
2893
2892
2891
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2889
2888
2887
2886
2885
2884
2883
2882
14 JULY 1973
11.5 μm
min.
min.


2882
2883
2884
2885
2886
2887
2888
2889
2890
2891
2892
2893
2894
2895
14 JULY 1973
6.7 μm


2908
2907
2906
2905
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2902
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2899
2898
2897
2896
15 JULY 1973
11.5 μm
min.
min.

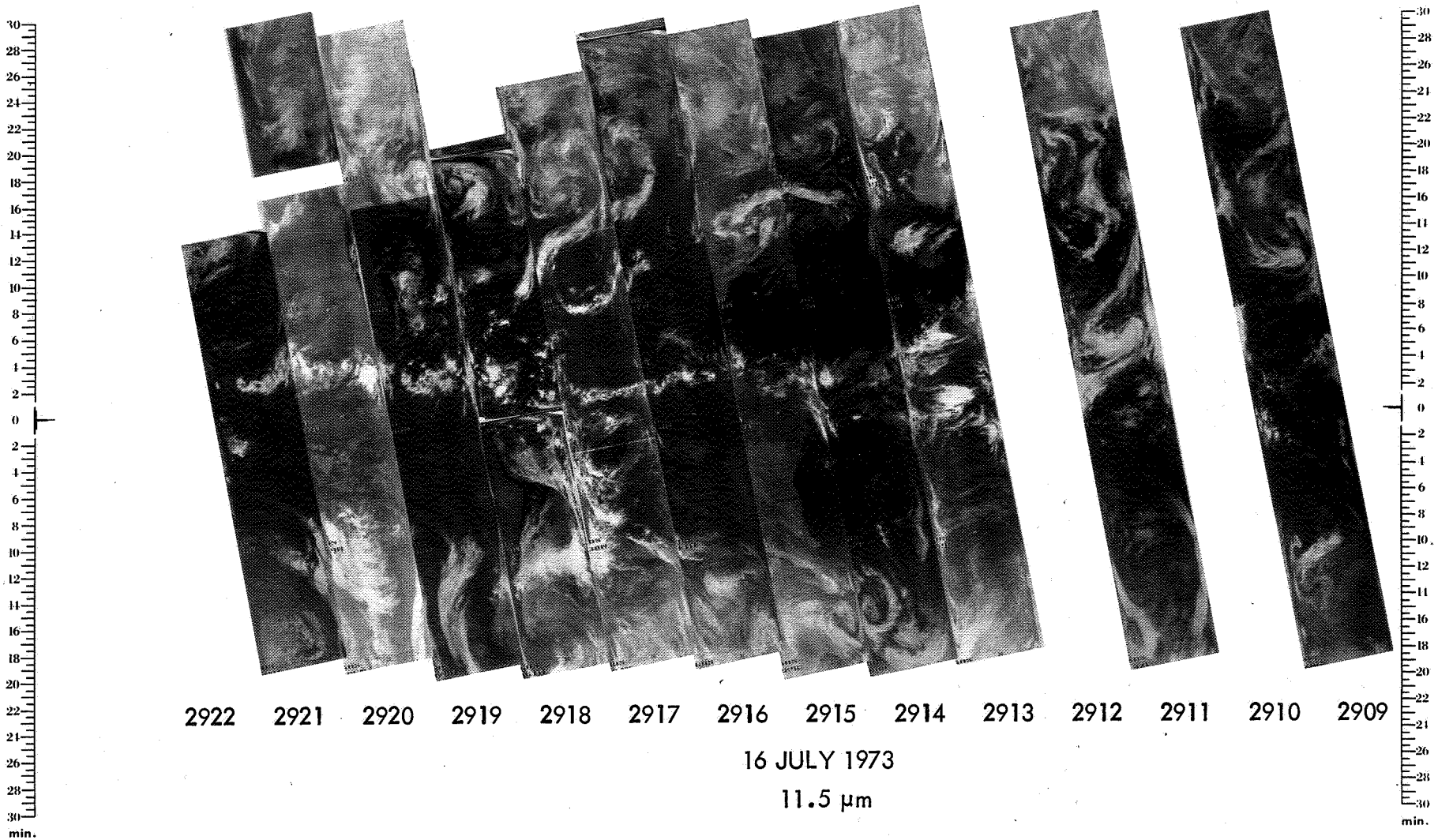


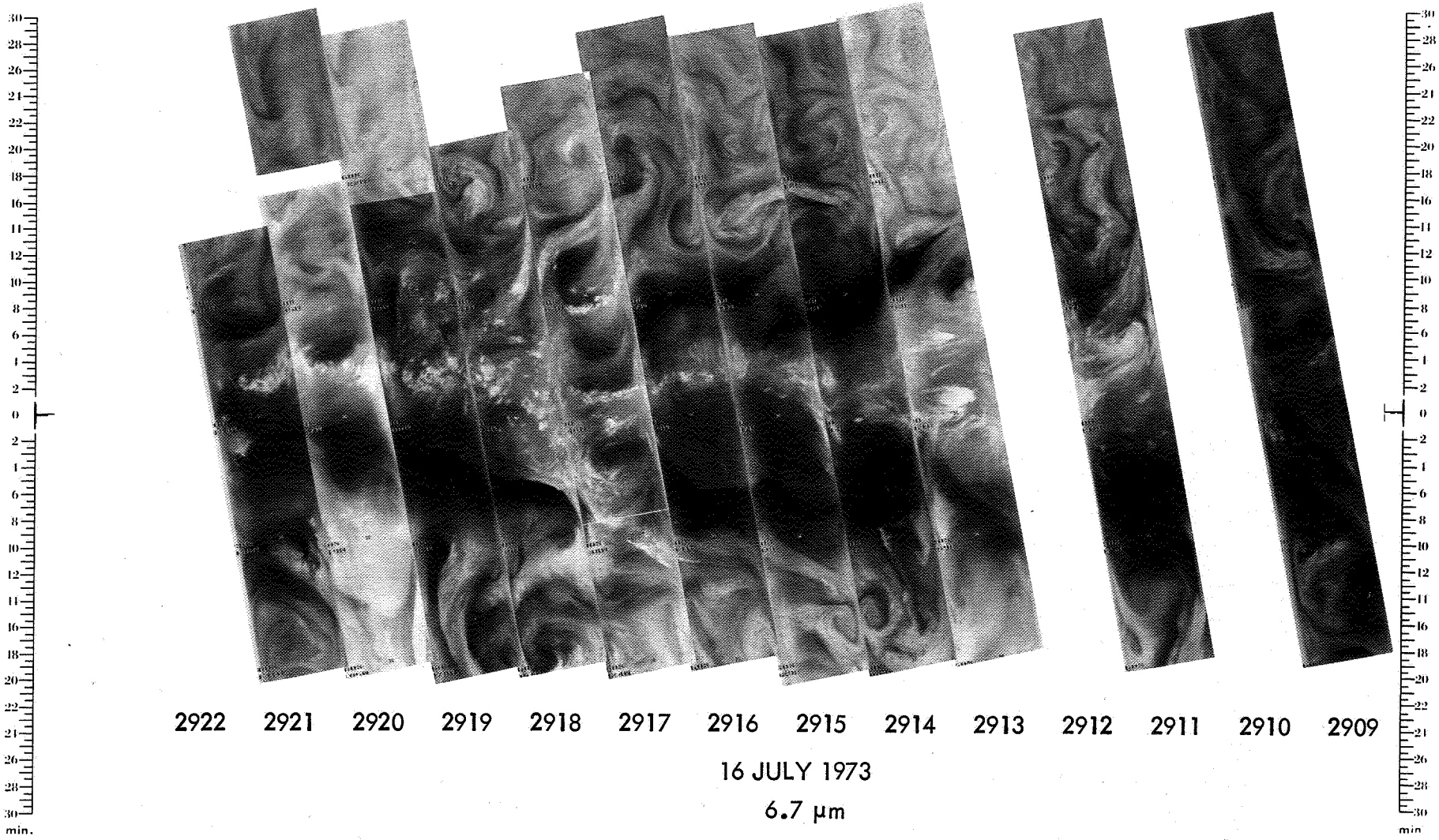
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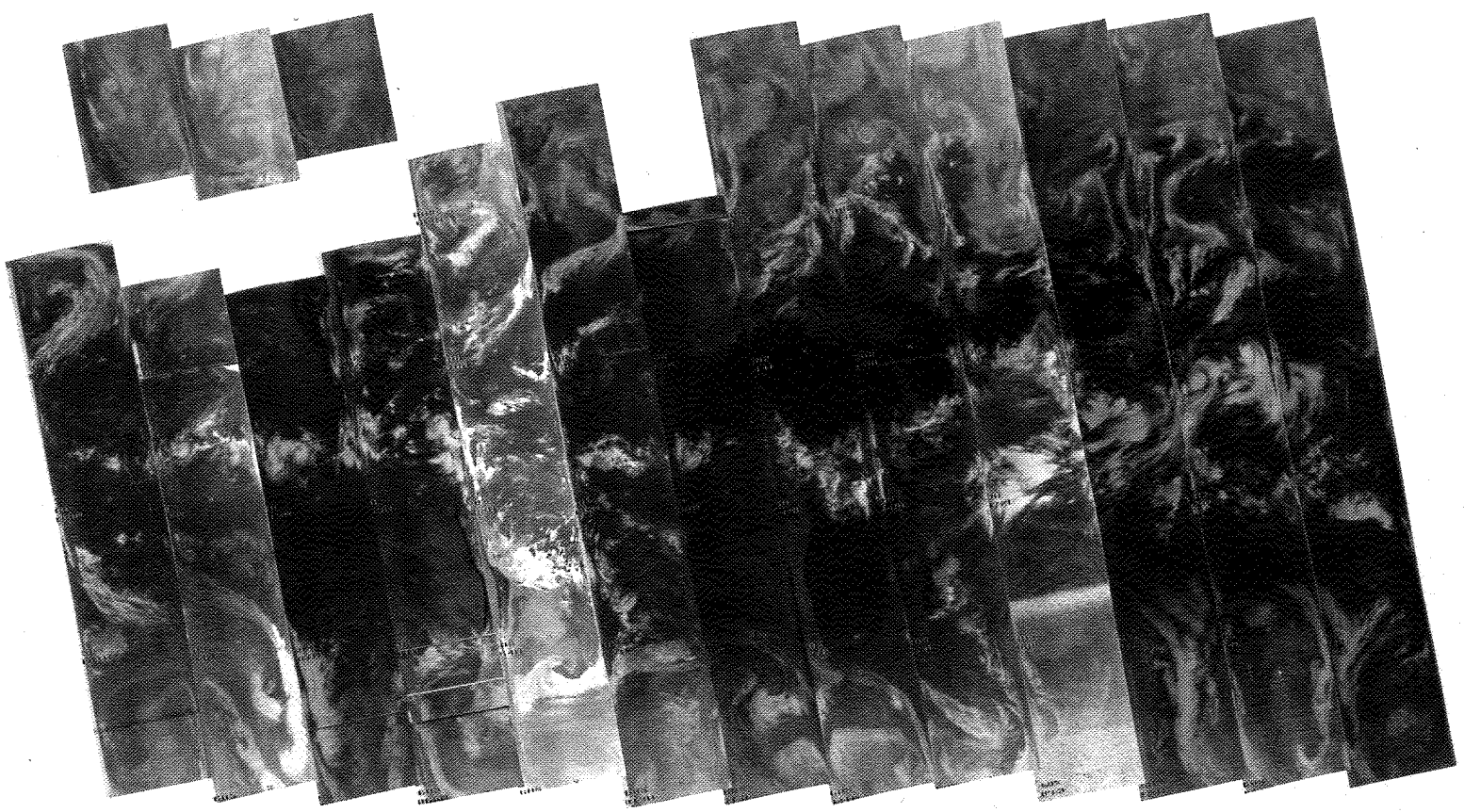
15 JULY 1973

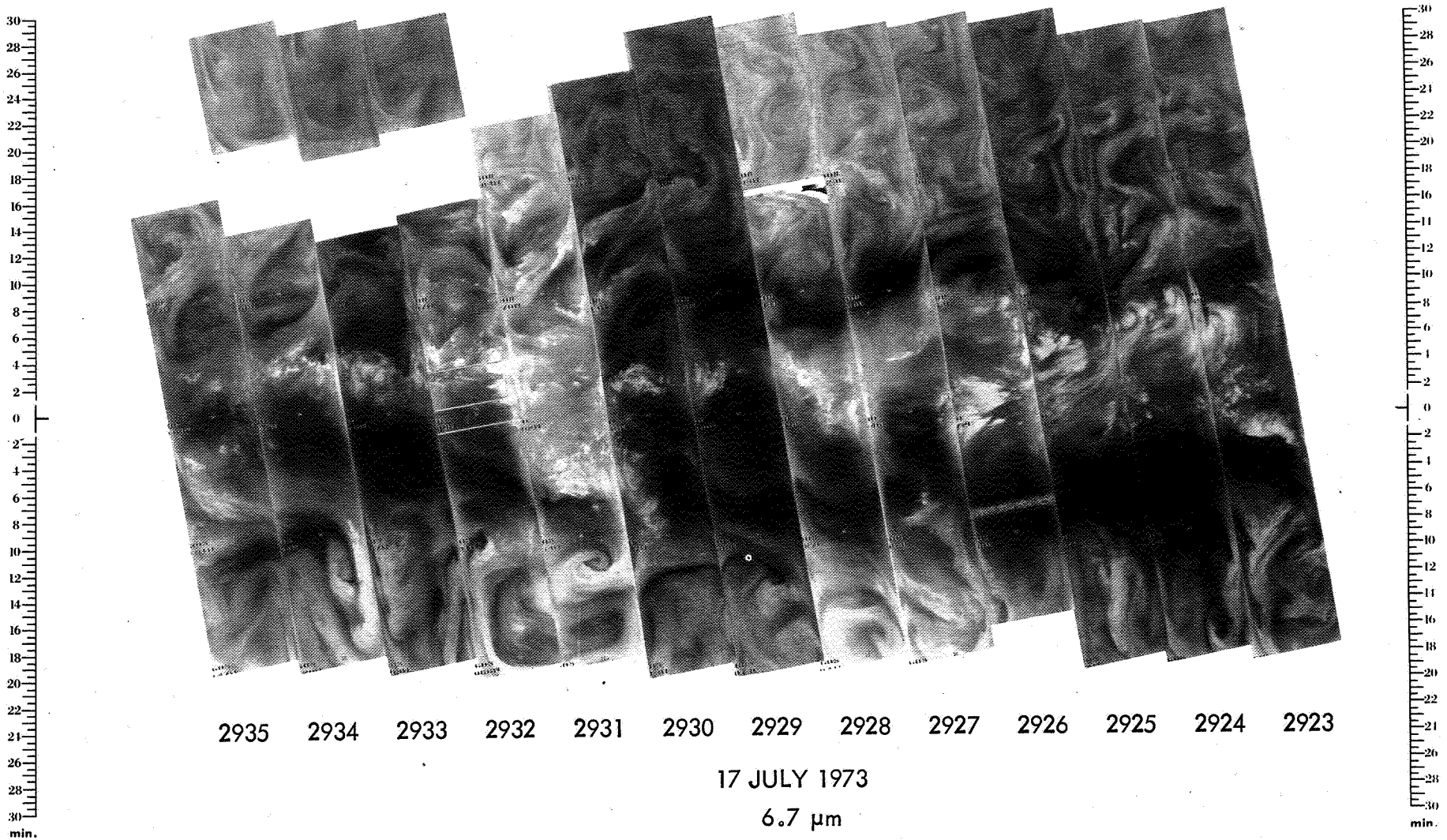
6.7 μm

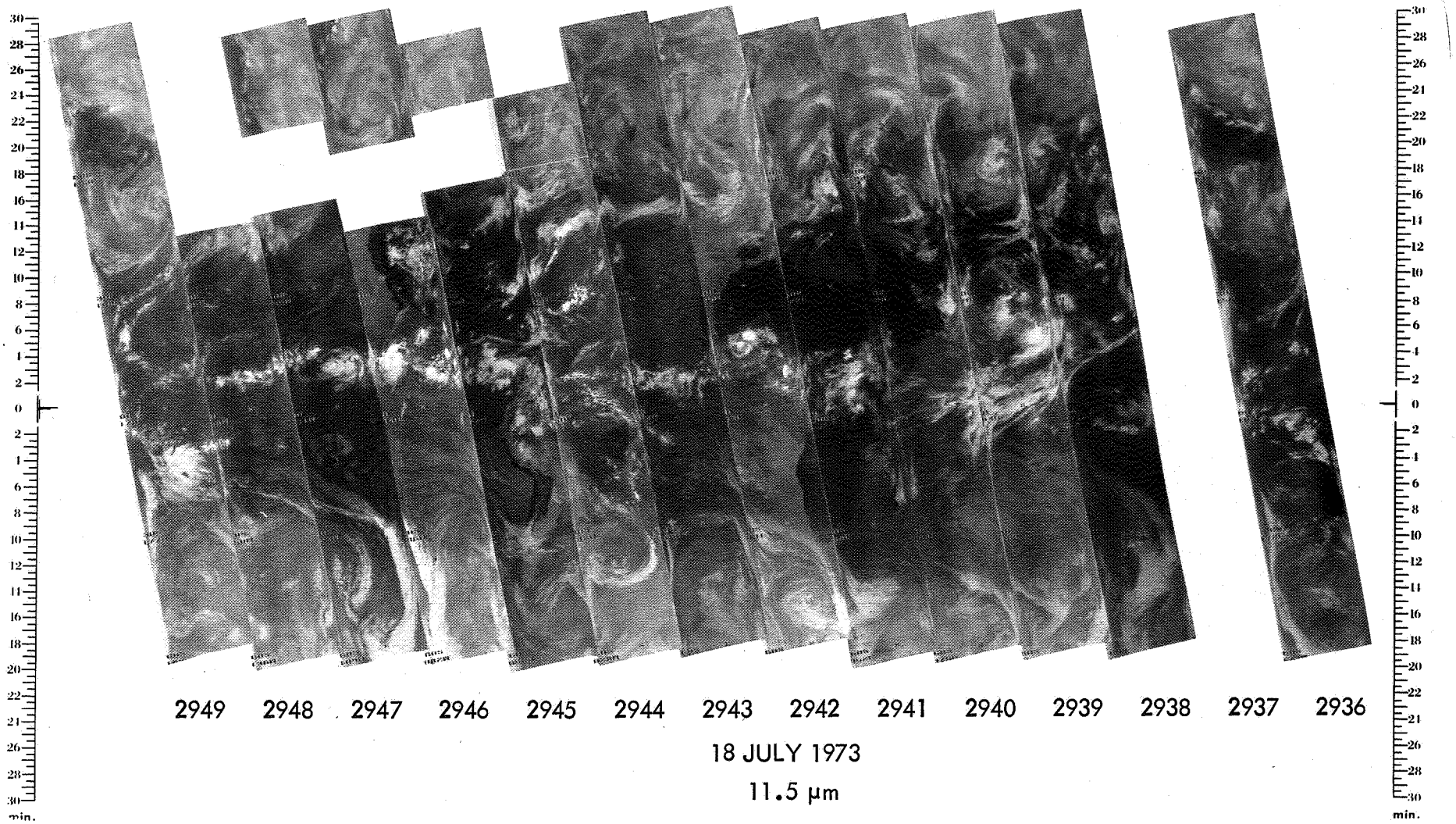
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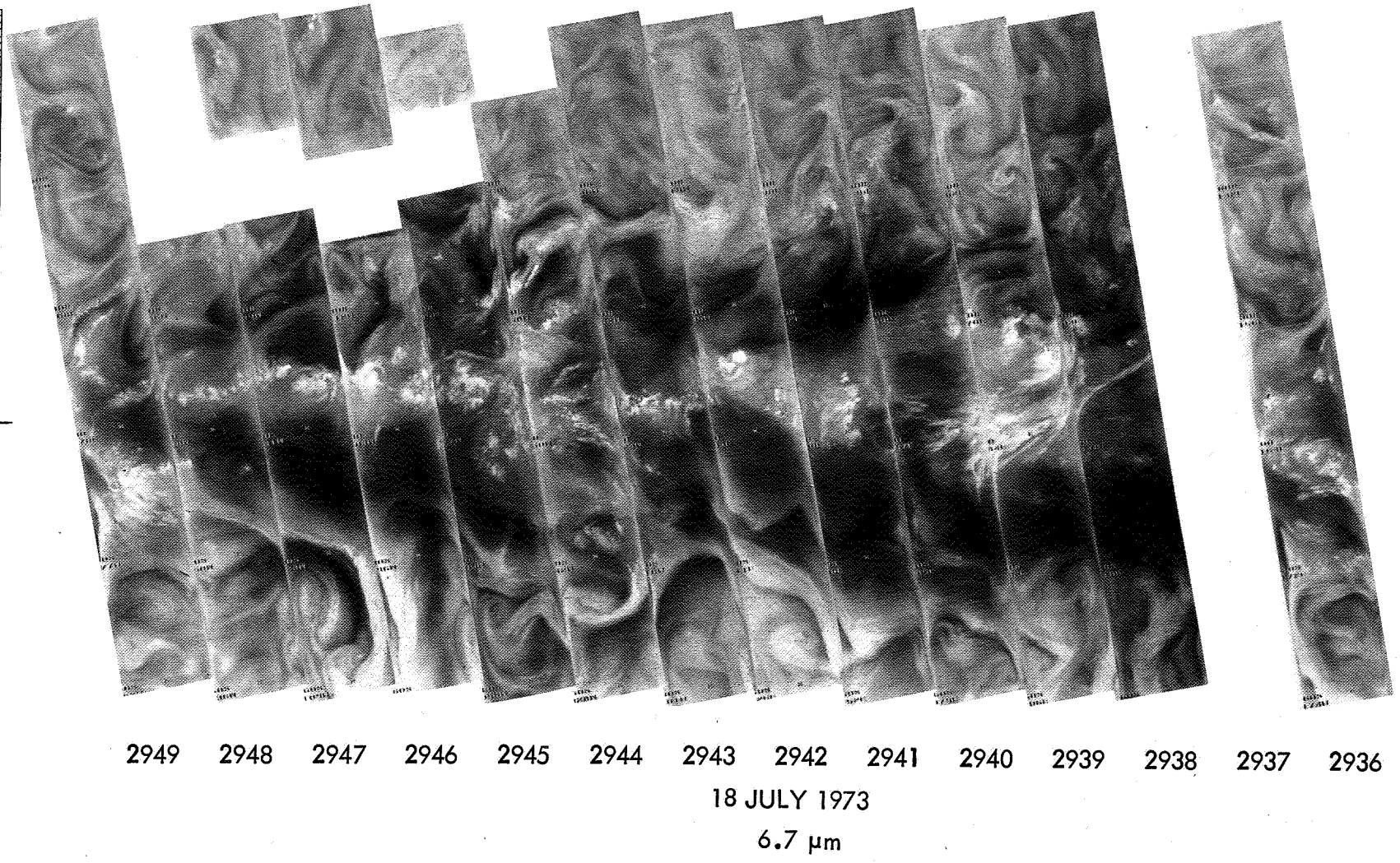

2922
2921
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2916
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2914
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2912
2911
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2909
16 JULY 1973
11.5 μm
min.
min.

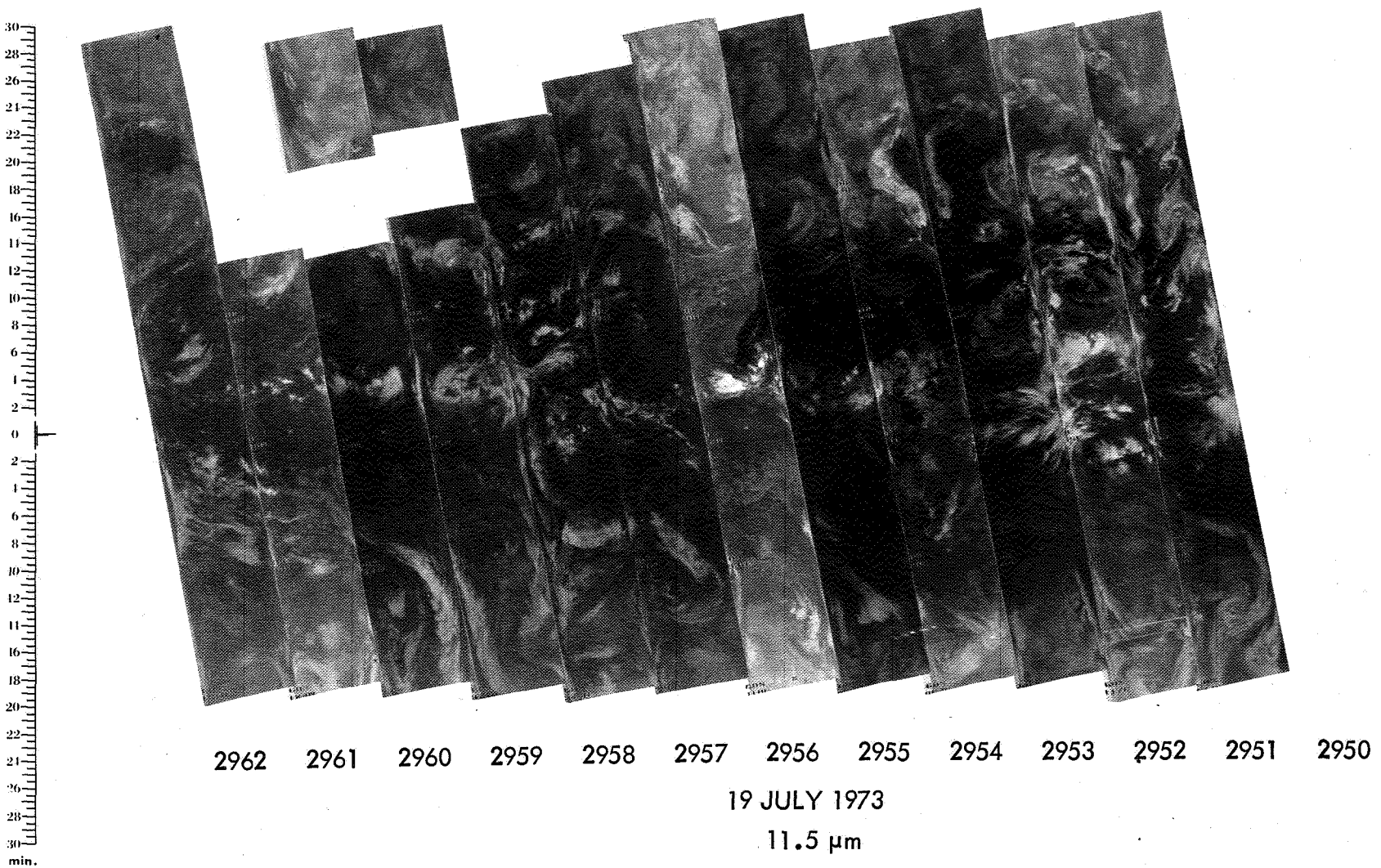

2922
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2911
2910
2909
16 JULY 1973
6.7 μm
min.
min.

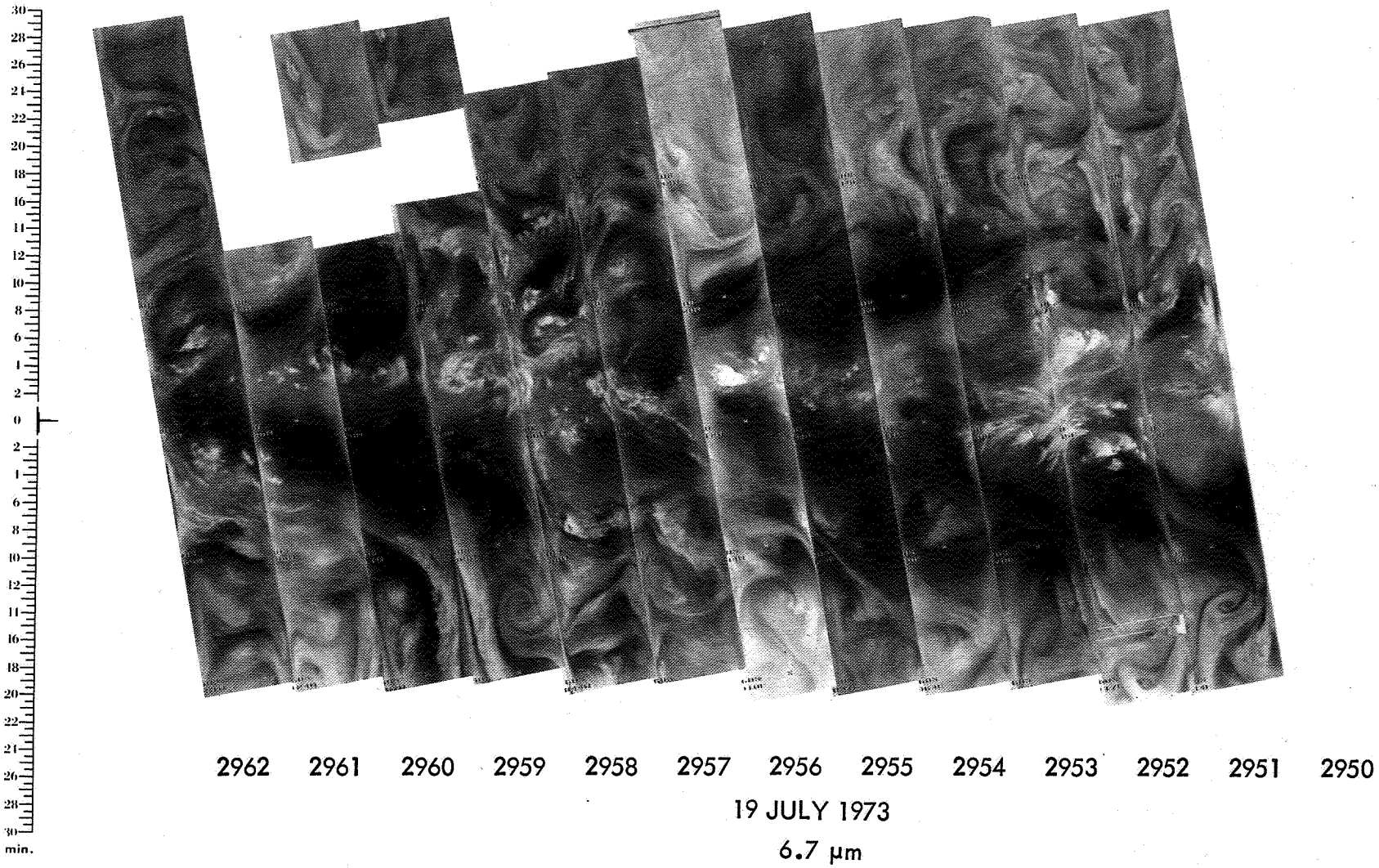

2935
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2924
2923
17 JULY 1973
11.5 μm
min.
min.

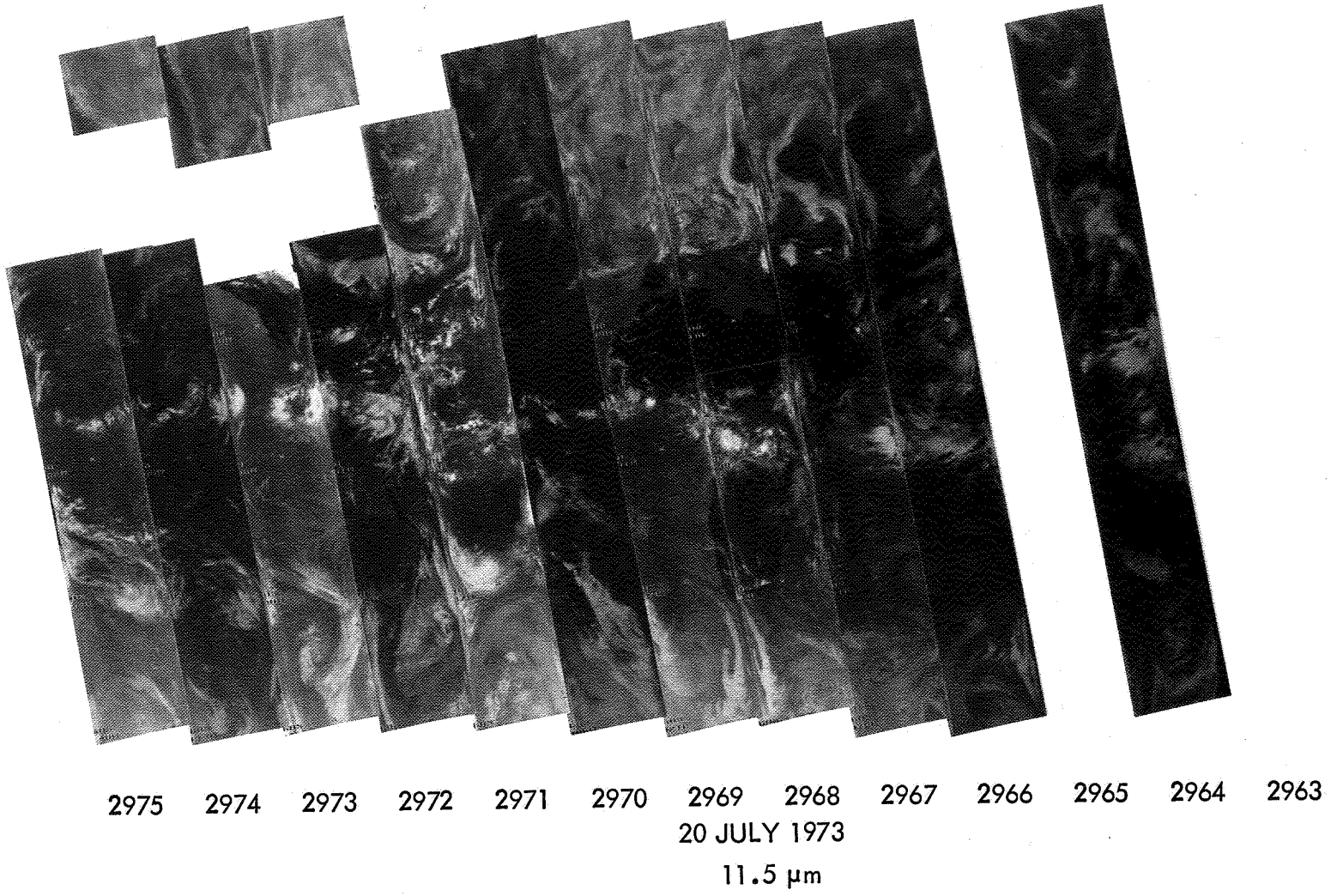

2935
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2923
17 JULY 1973
6.7 μm
min.
min.

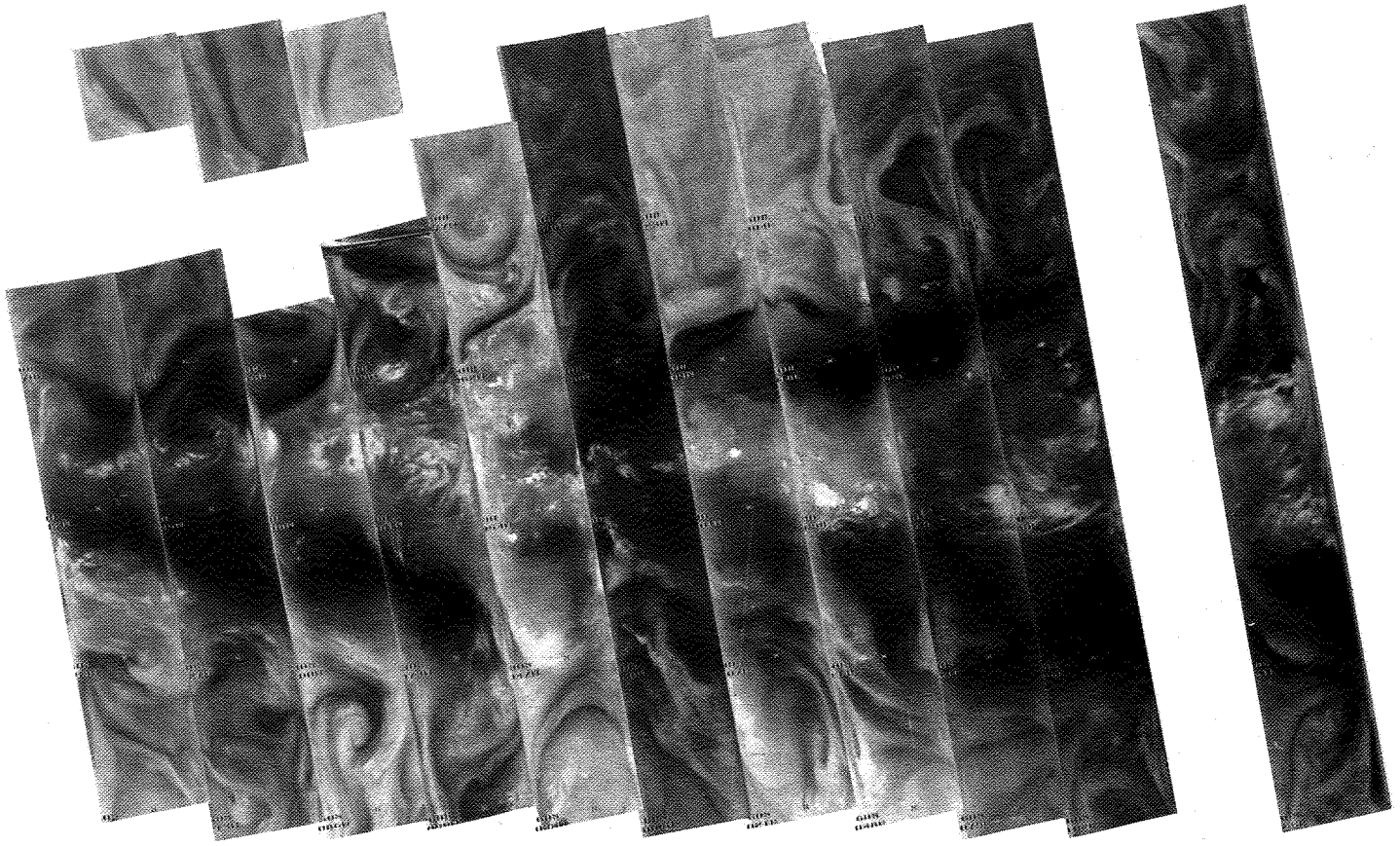

2949 2948 2947 2946 2945 2944 2943 2942 2941 2940 2939 2938 2937 2936
18 JULY 1973
11.5 μm
min.
min.

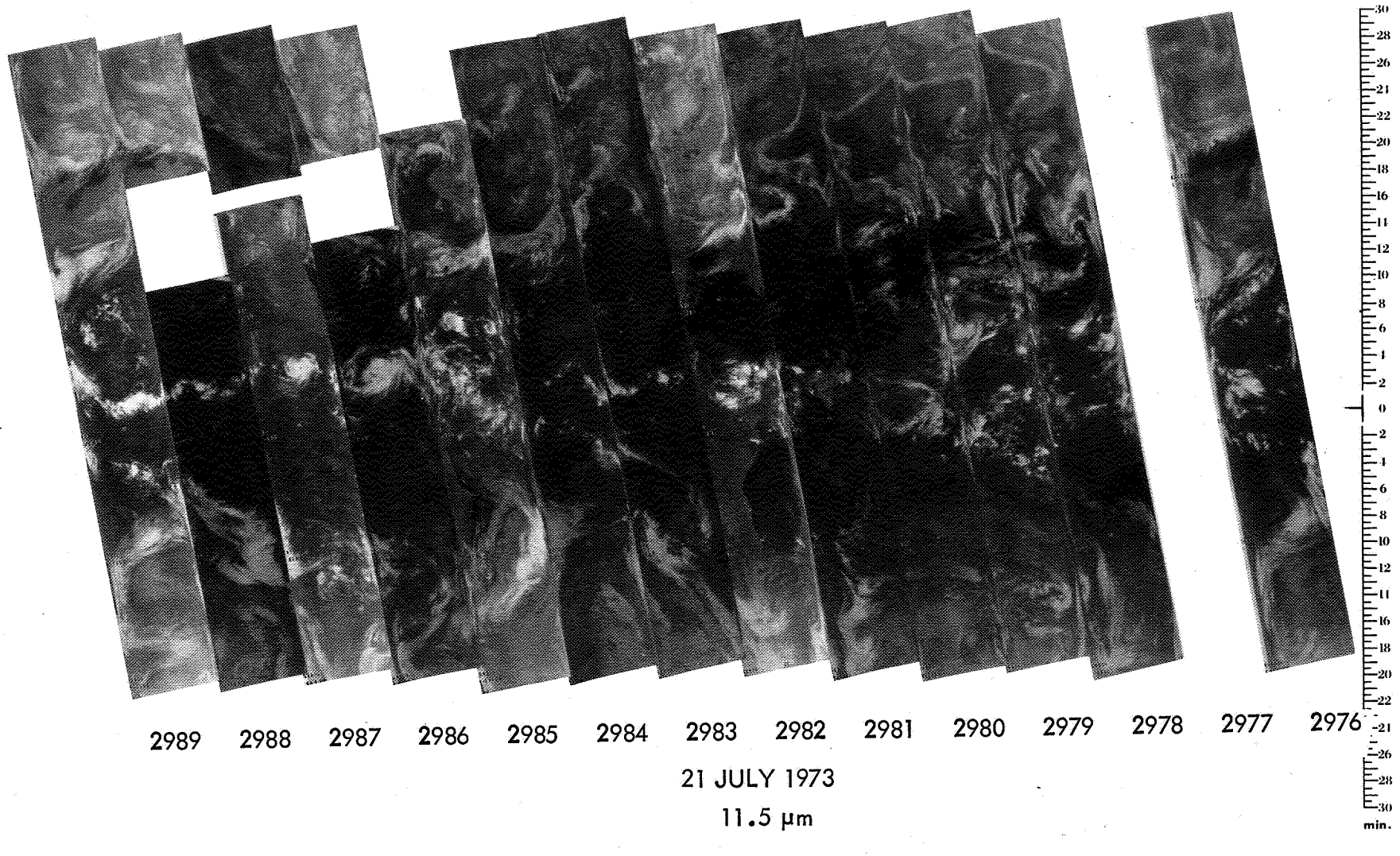

2949
2948
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2939
2938
2937
2936
18 JULY 1973
6.7 μm
min.
min.

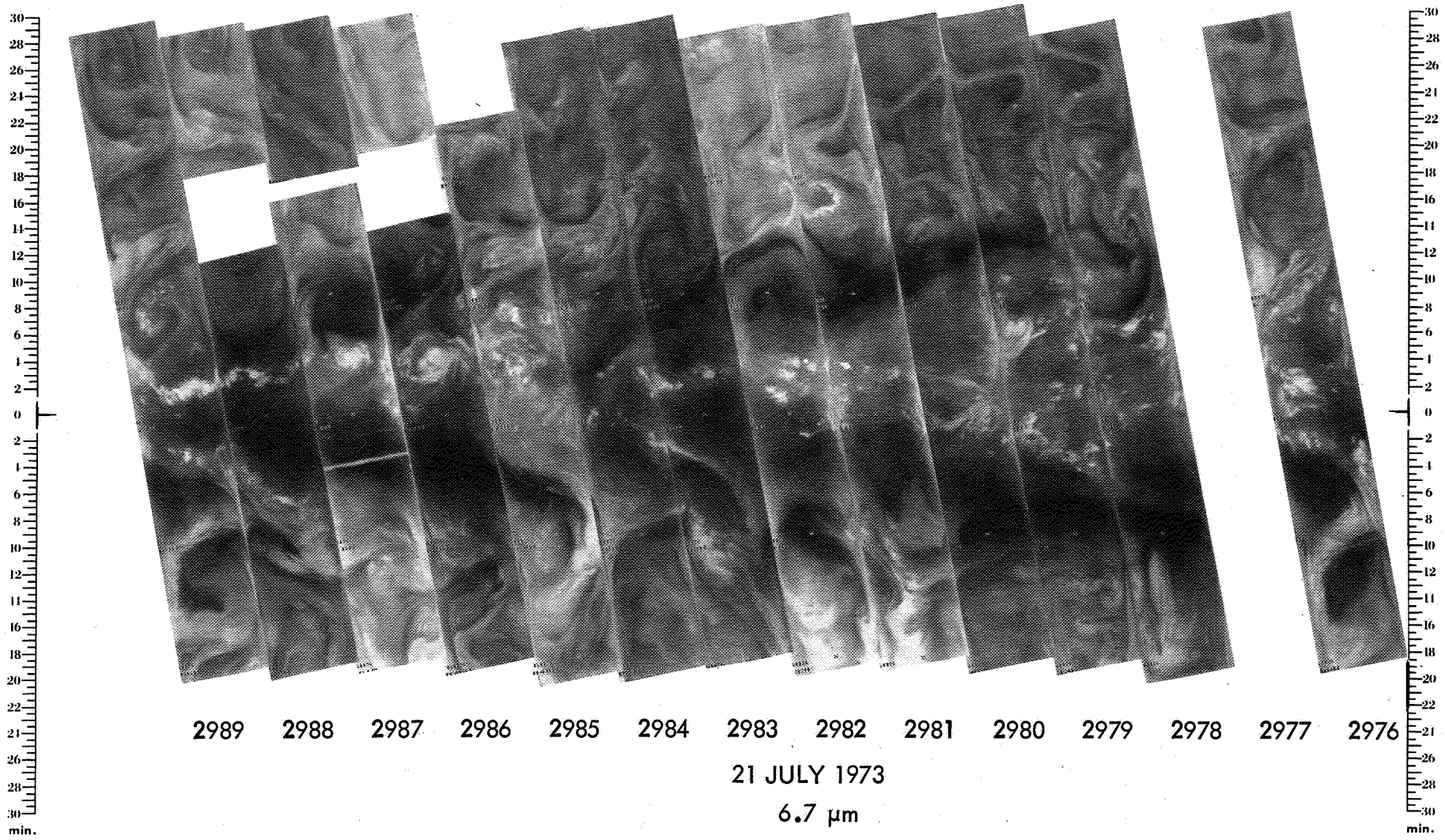

2962
2961
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2951
2950
19 JULY 1973
11.5 μm
min.
min.

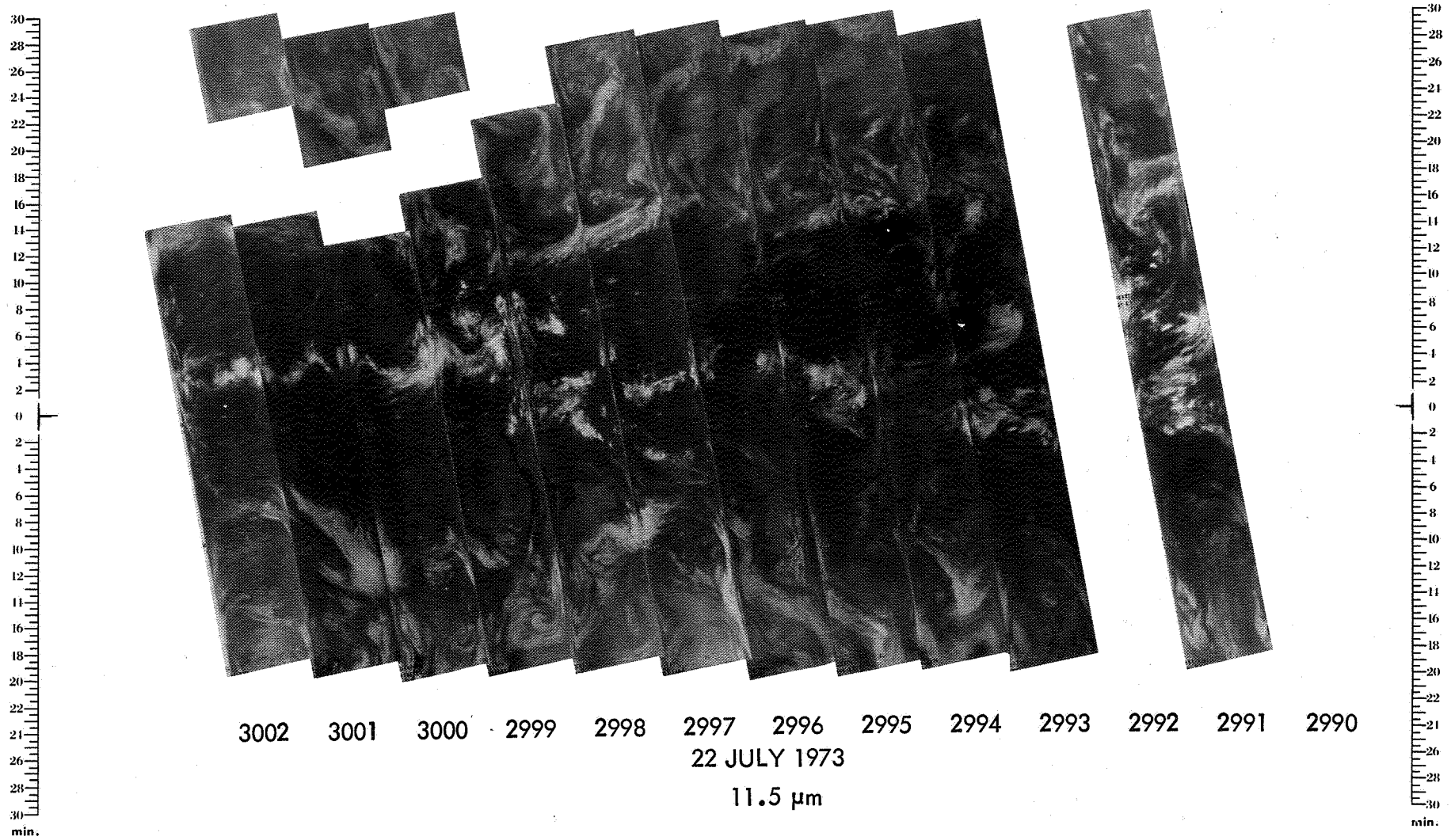

2962
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2950
19 JULY 1973
6.7 μm
min.
min.

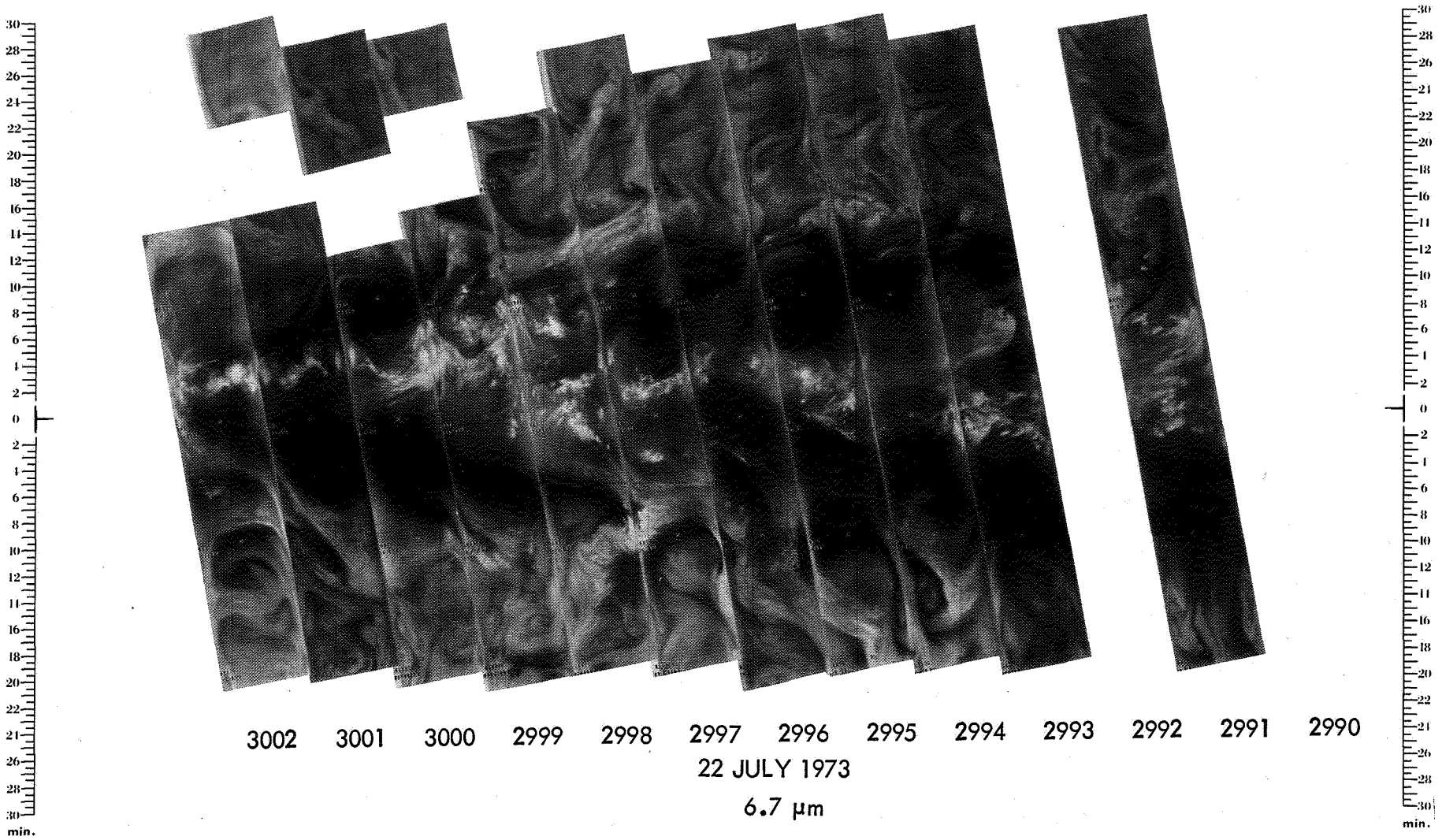

2975
2974
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2968
2967
2966
2965
2964
2963
20 JULY 1973
11.5 μm
min.
min.

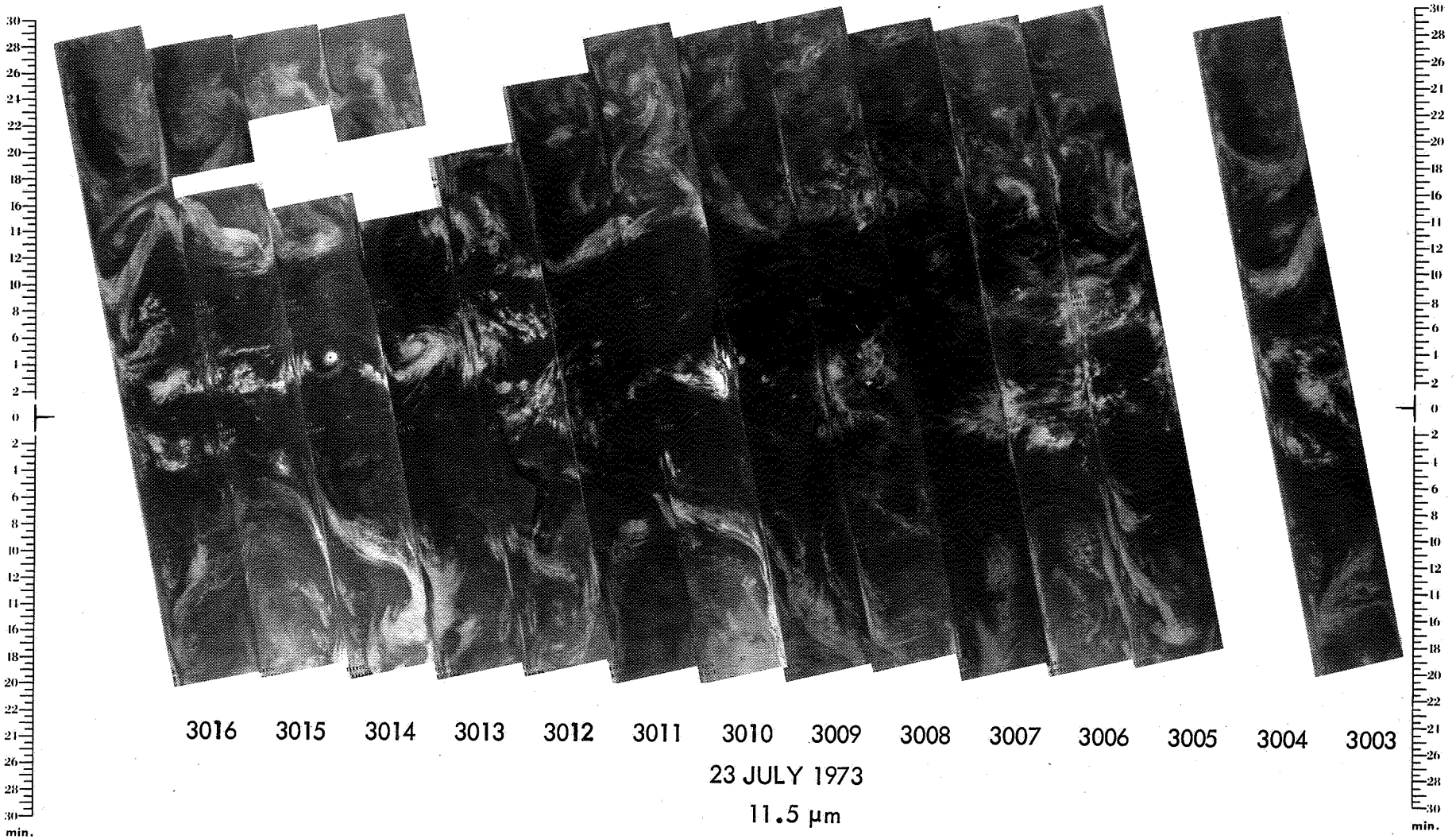

2975
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2963
20 JULY 1973
6.7 μm
min.
min.

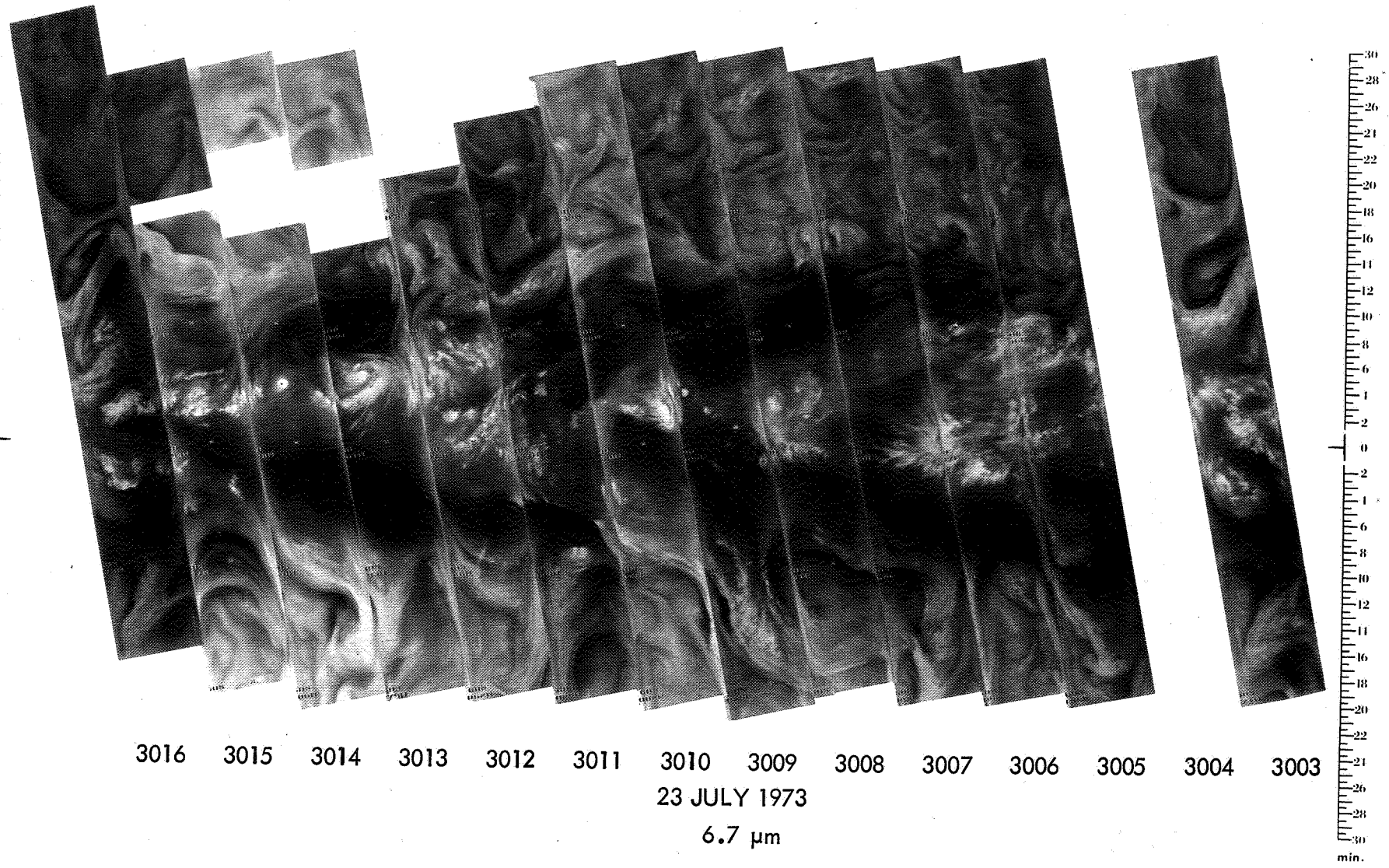

2989
2988
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2981
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2976
21 JULY 1973
11.5 μm
min.
min.

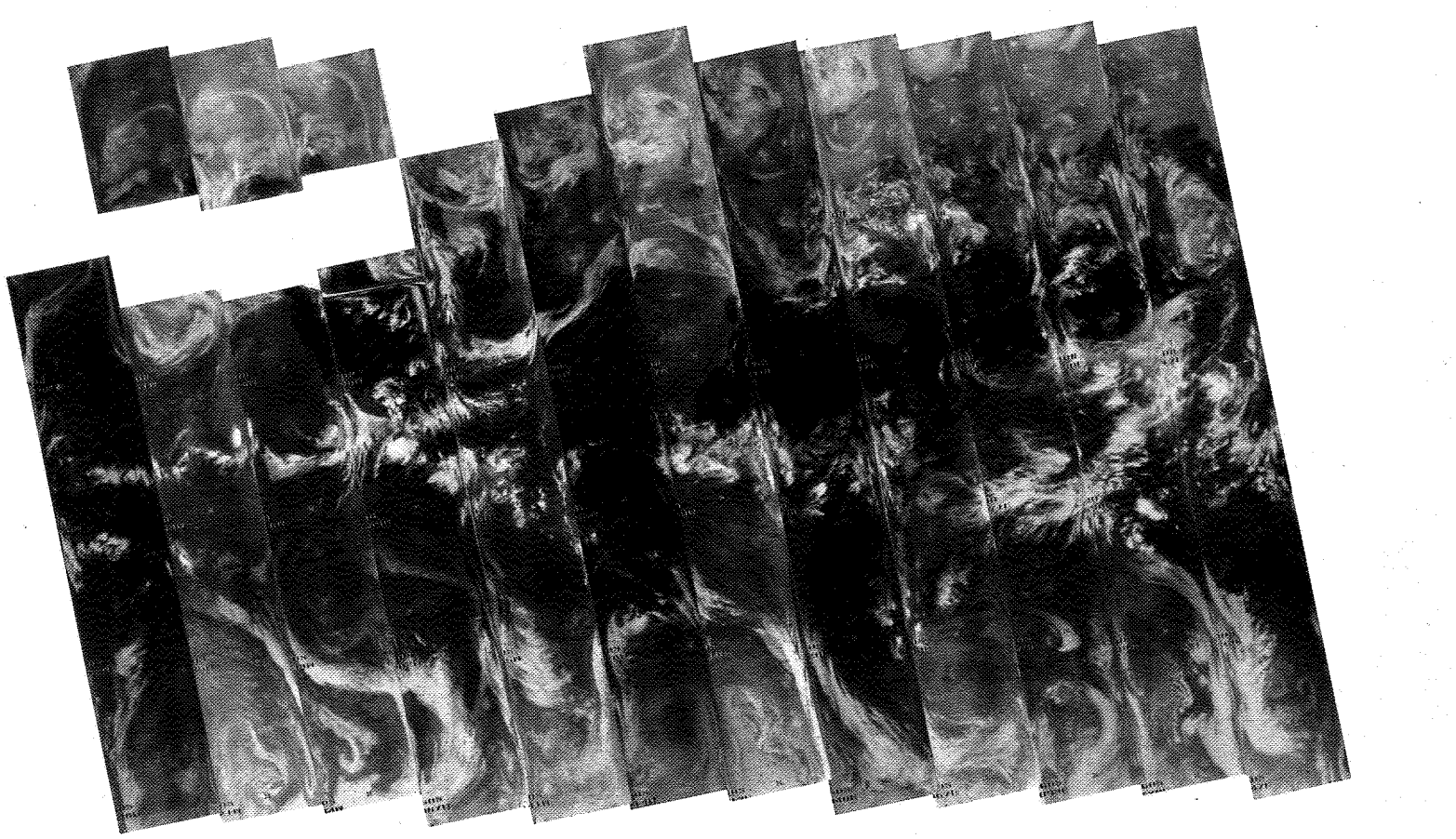

2989
2988
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2983
2982
2981
2980
2979
2978
2977
2976
21 JULY 1973
6.7 μm
min.
min.


3002 3001 3000 2999 2998 2997 2996 2995 2994 2993 2992 2991 2990
22 JULY 1973
11.5 μm
min.
min.


3002 3001 3000 2999 2998 2997 2996 2995 2994 2993 2992 2991 2990
22 JULY 1973
6.7 μm
min.
min.


3016
3015
3014
3013
3012
3011
3010
3009
3008
3007
3006
3005
3004
3003
23 JULY 1973
11.5 μm
min.
min.


3016
3015
3014
3013
3012
3011
3010
3009
3008
3007
3006
3005
3004
3003
23 JULY 1973
6.7 μm
min.
min.

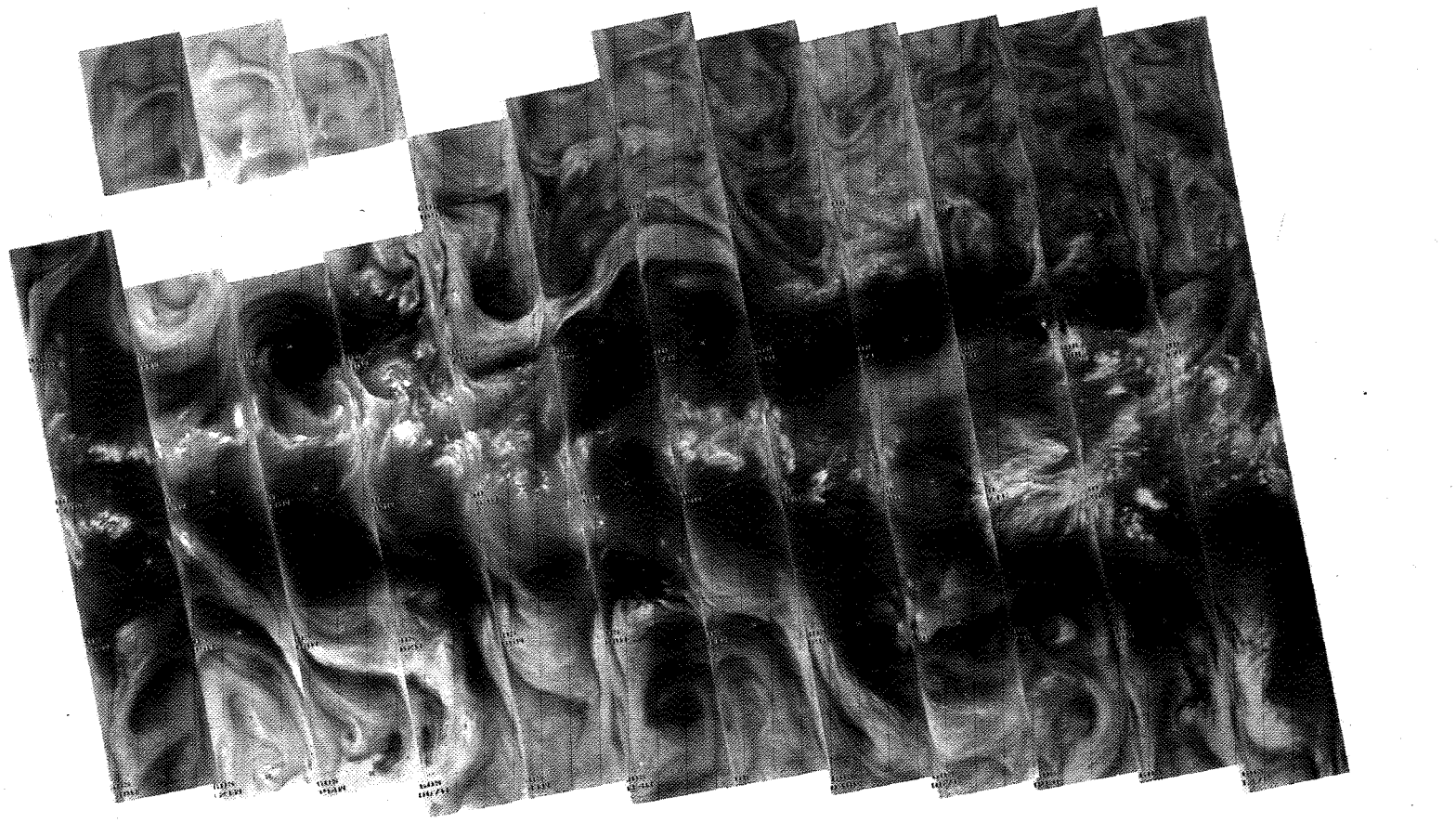


3029 3028 3027 3026 3025 3024 3023 3022 3021 3020 3019 3018 3017

24 JULY 1973

11.5 μm

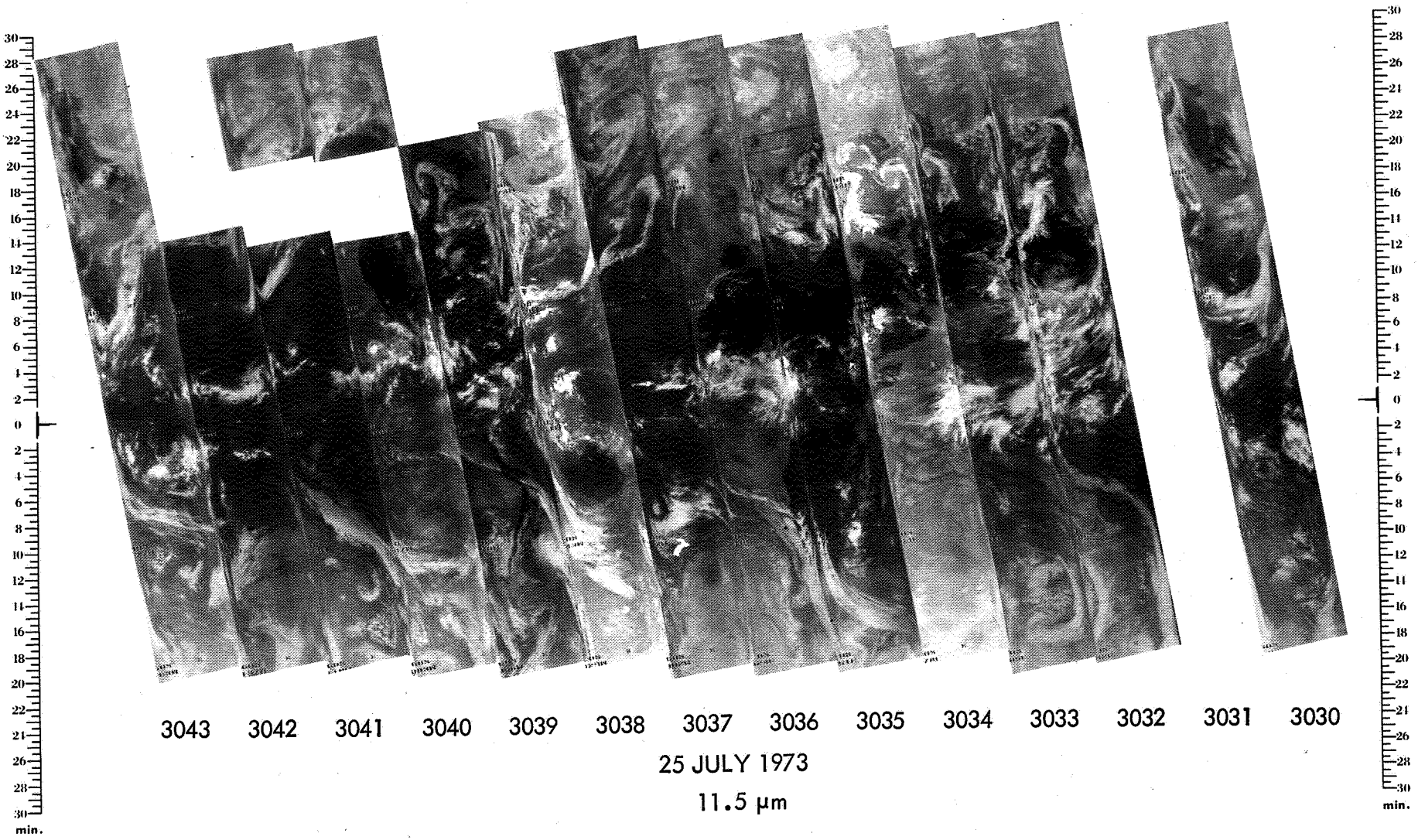
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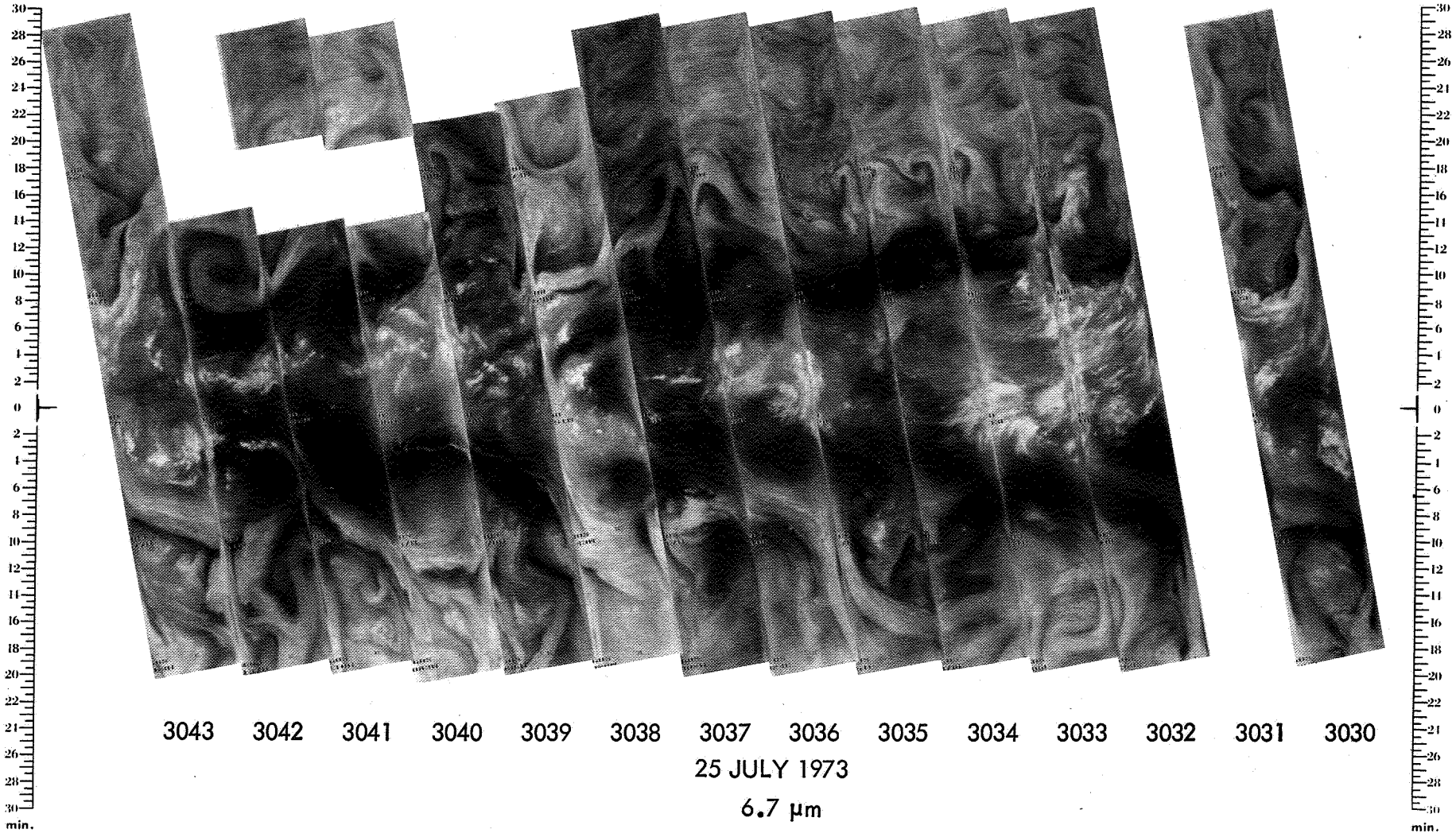


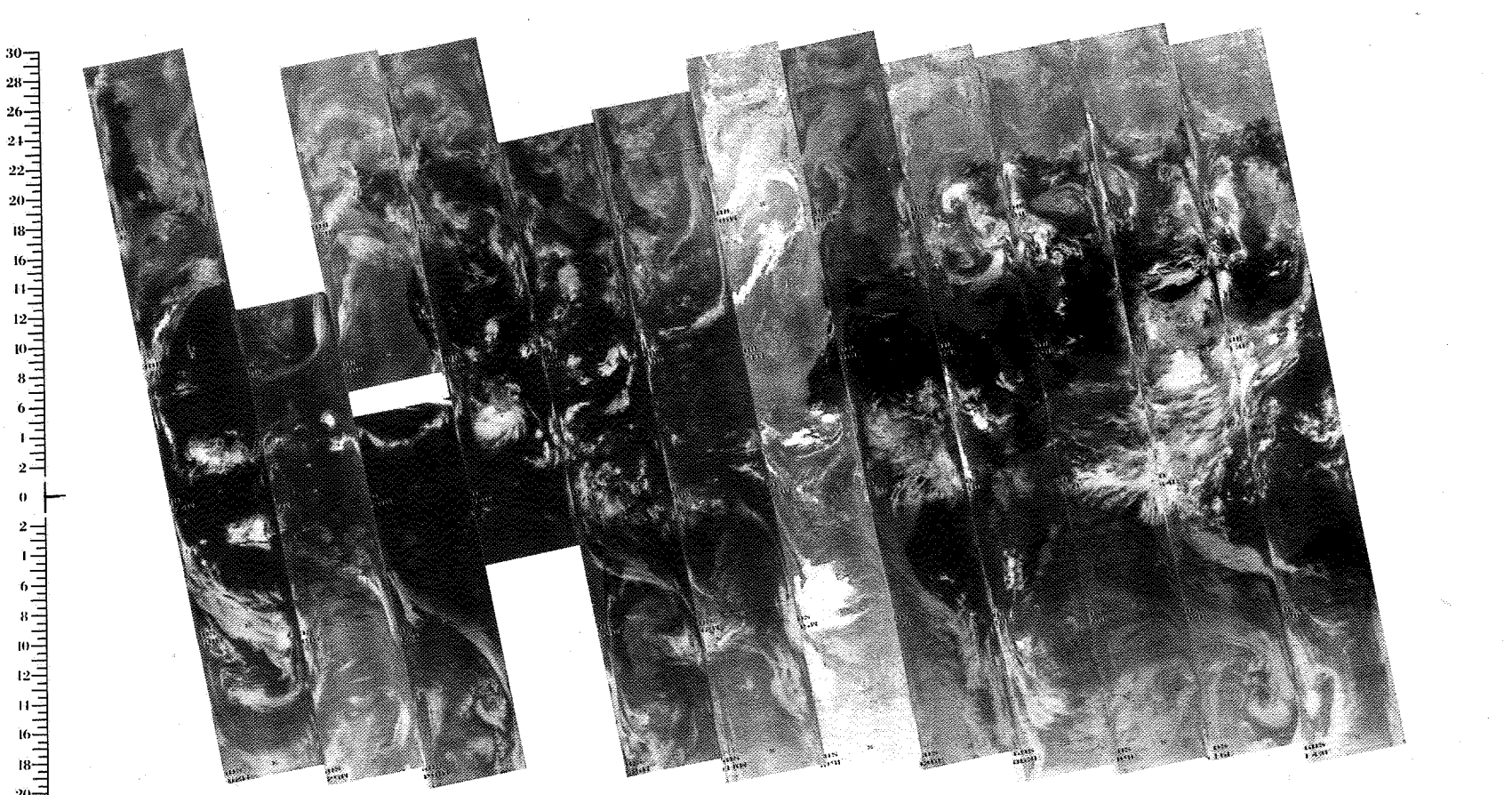
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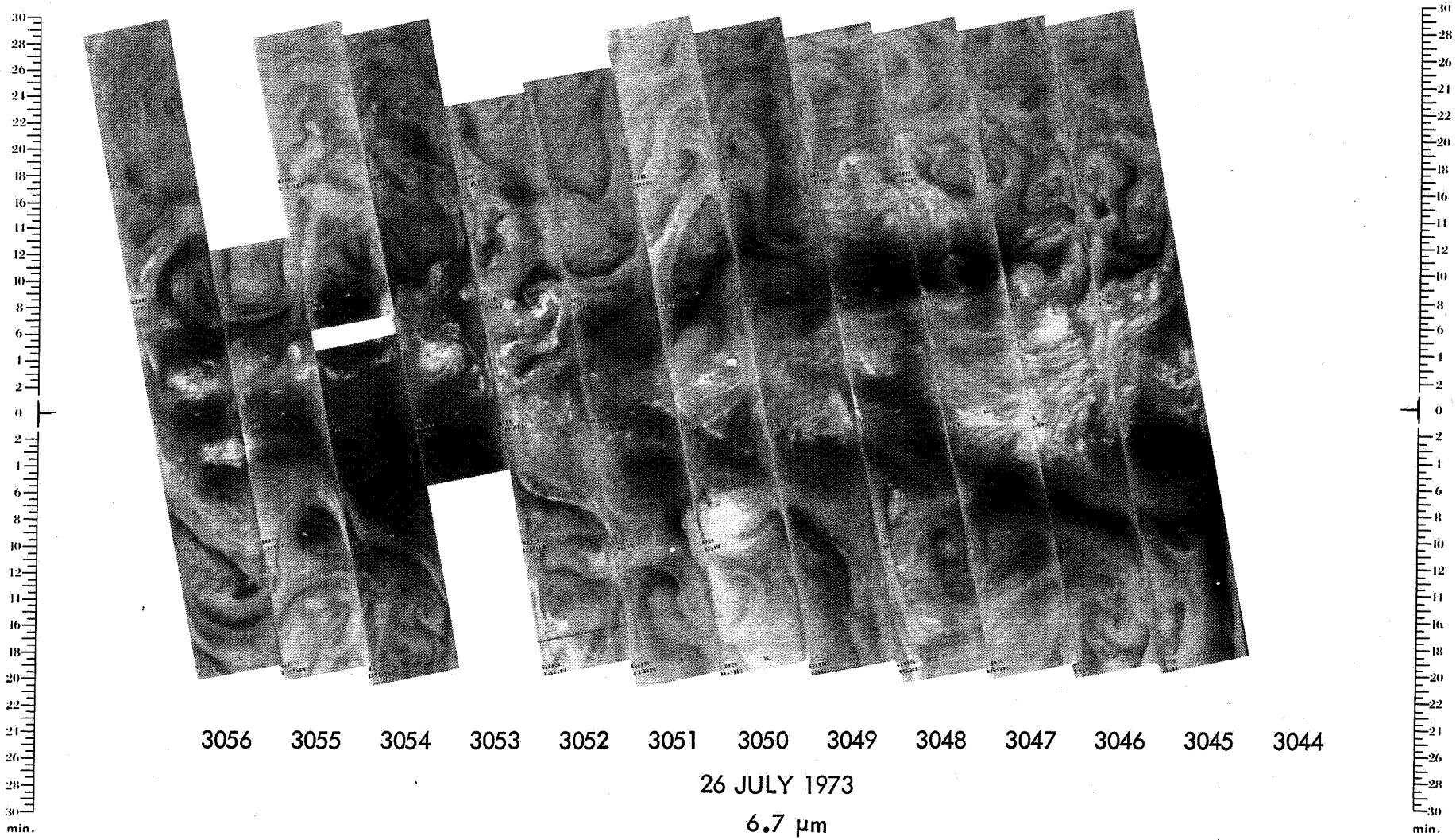
24 JULY 1973

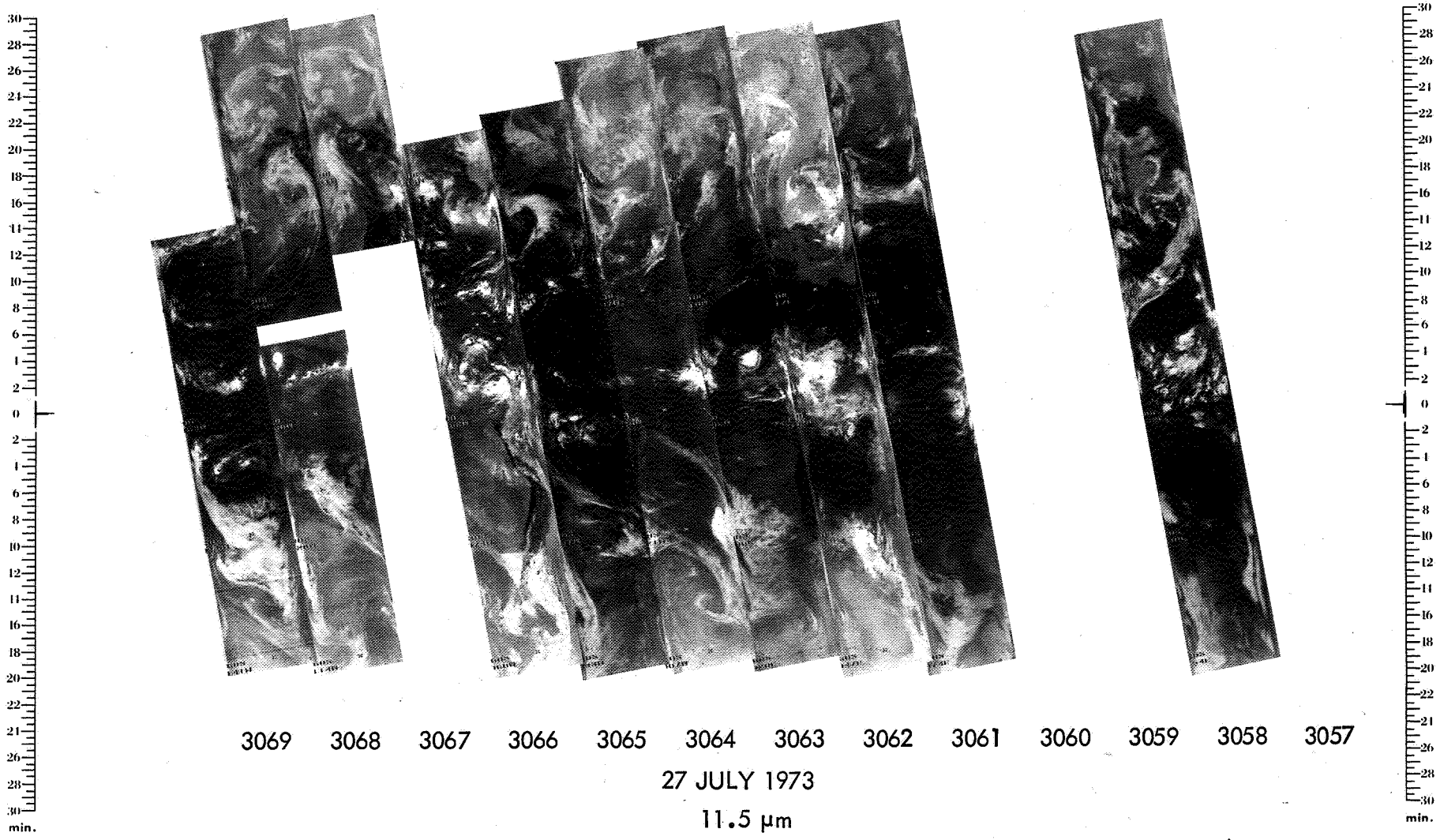
6.7 μm

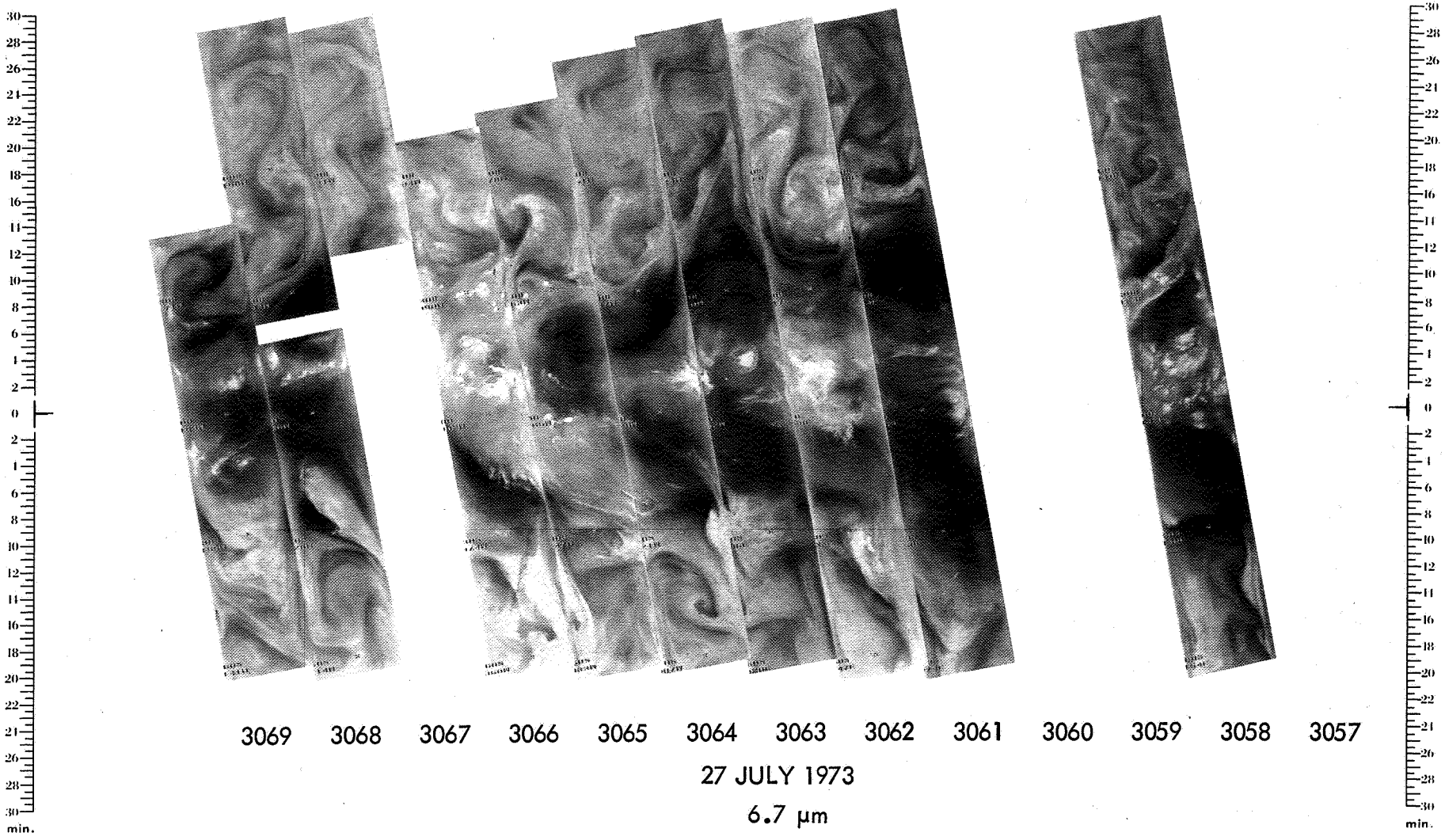

3043
3042
3041
3040
3039
3038
3037
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3035
3034
3033
3032
3031
3030
25 JULY 1973
11.5 μm
min.
min.

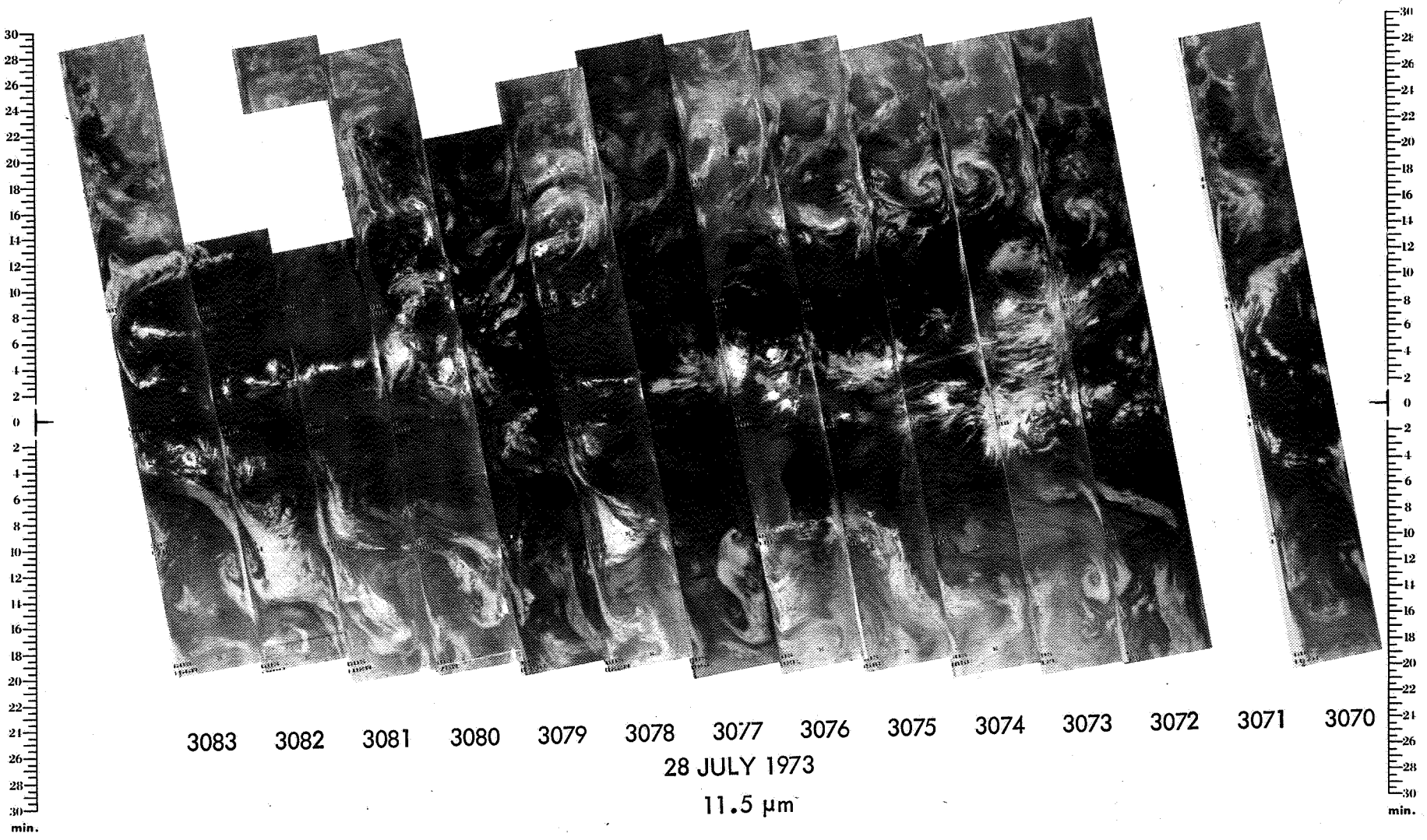

3043 3042 3041 3040 3039 3038 3037 3036 3035 3034 3033 3032 3031 3030
25 JULY 1973
6.7 μm
min.
min.

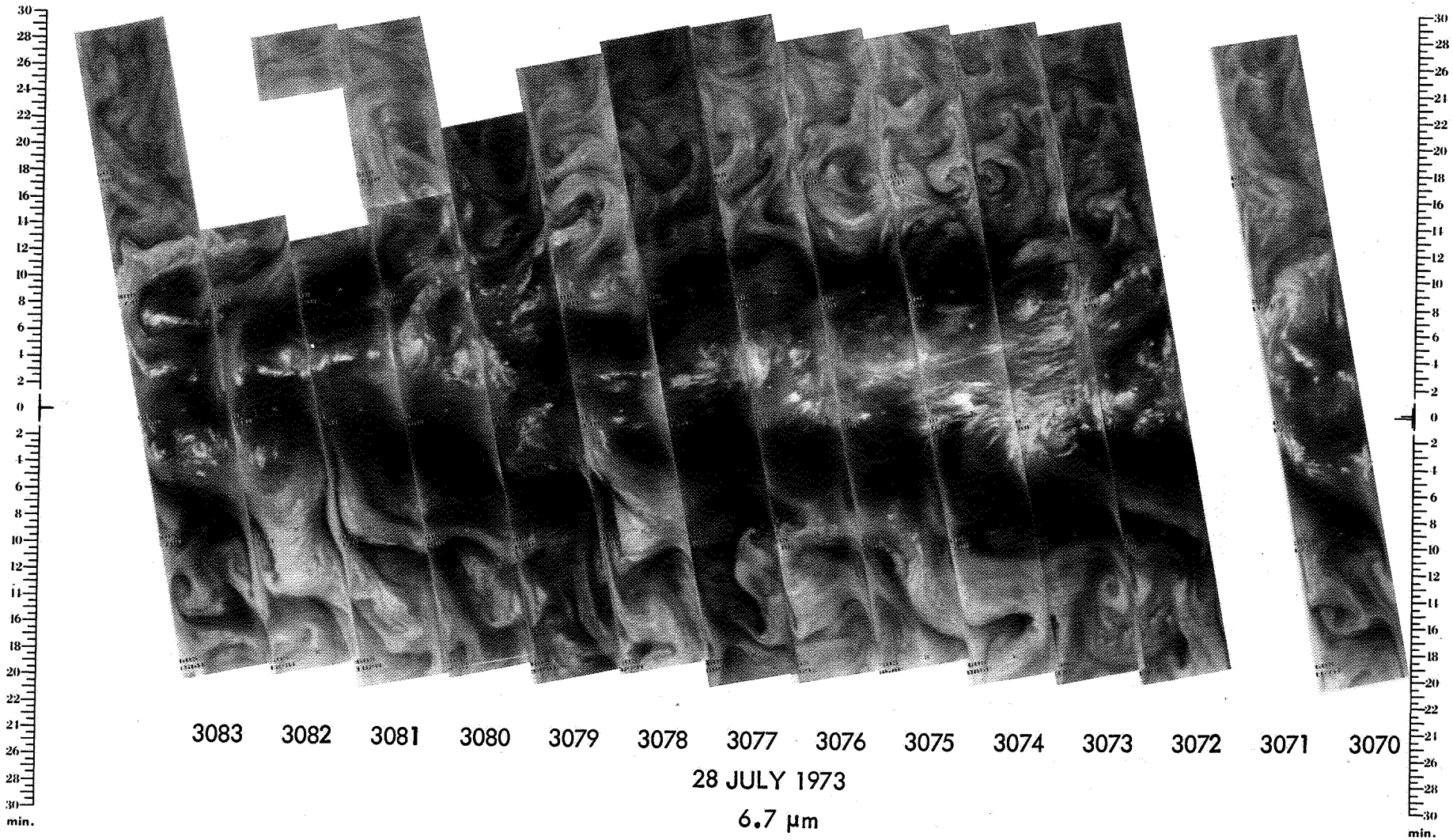

3056 3055 3054 3053 3052 3051 3050 3049 3048 3047 3046 3045 3044
26 JULY 1973
11.5 μm
min.
min.

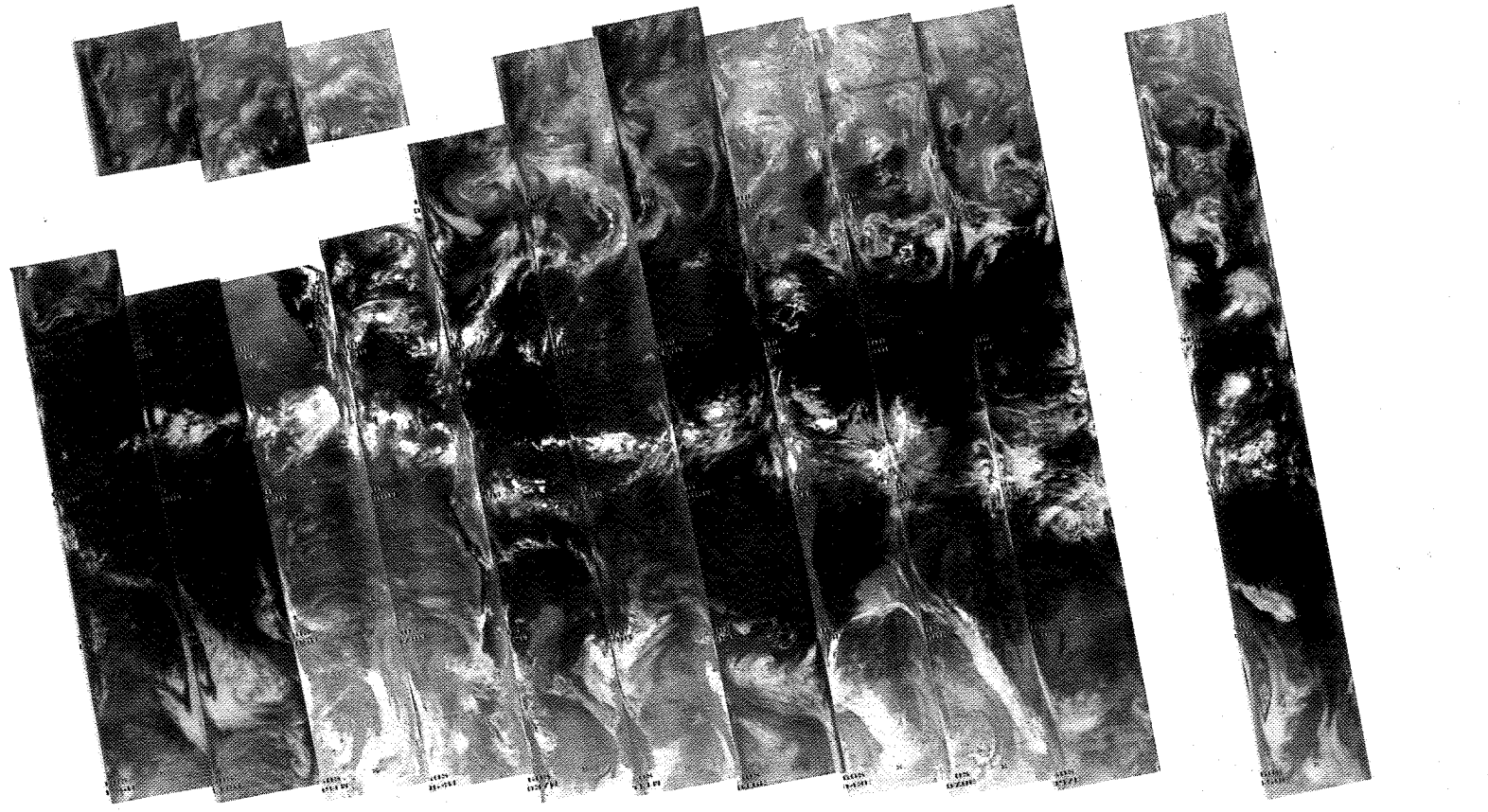

3056 3055 3054 3053 3052 3051 3050 3049 3048 3047 3046 3045 3044
26 JULY 1973
6.7 μm
min.
min.

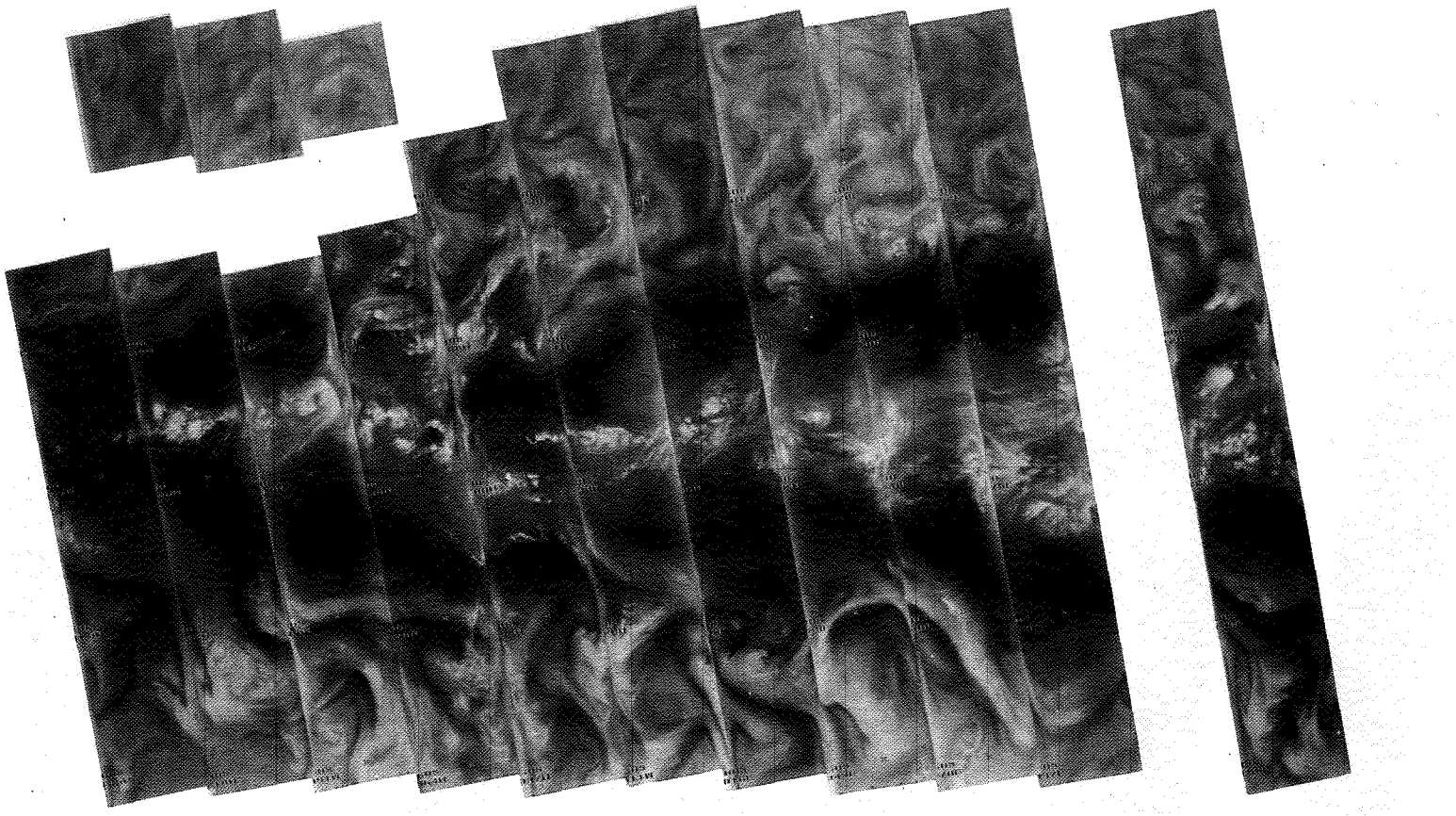

3069
3068
3067
3066
3065
3064
3063
3062
3061
3060
3059
3058
3057
27 JULY 1973
11.5 μm
min.
min.

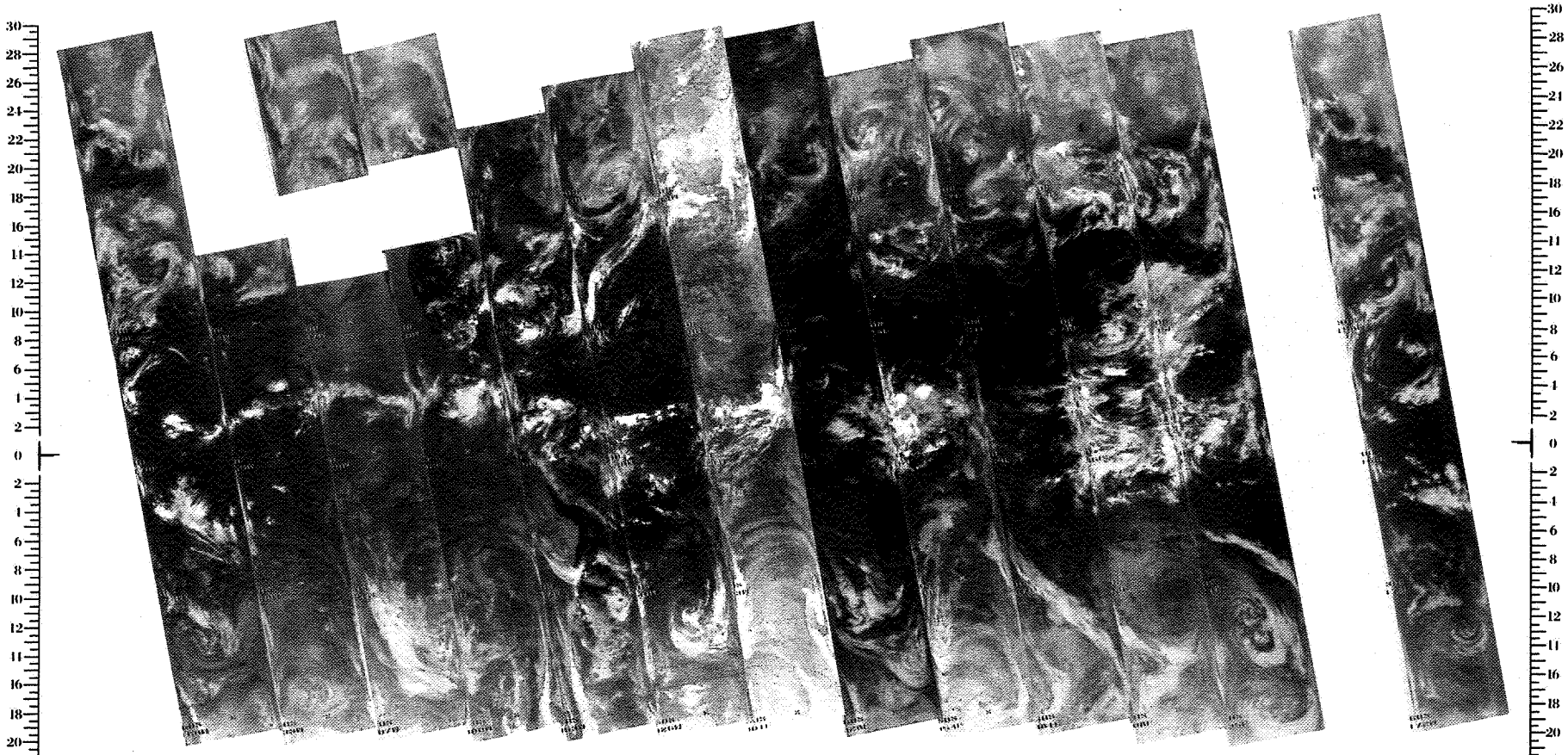

3069
3068
3067
3066
3065
3064
3063
3062
3061
3060
3059
3058
3057
27 JULY 1973
6.7 μm
min.
min.


3083
3082
3081
3080
3079
3078
3077
3076
3075
3074
3073
3072
3071
3070
28 JULY 1973
11.5 μm
min.
min.


3083
3082
3081
3080
3079
3078
3077
3076
3075
3074
3073
3072
3071
3070
28 JULY 1973
6.7 μm
min.
min.


3096 3095 3094 3093 3092 3091 3090 3089 3088 3087 3086 3085 3084
29 JULY 1973
11.5 μm
min.
min.

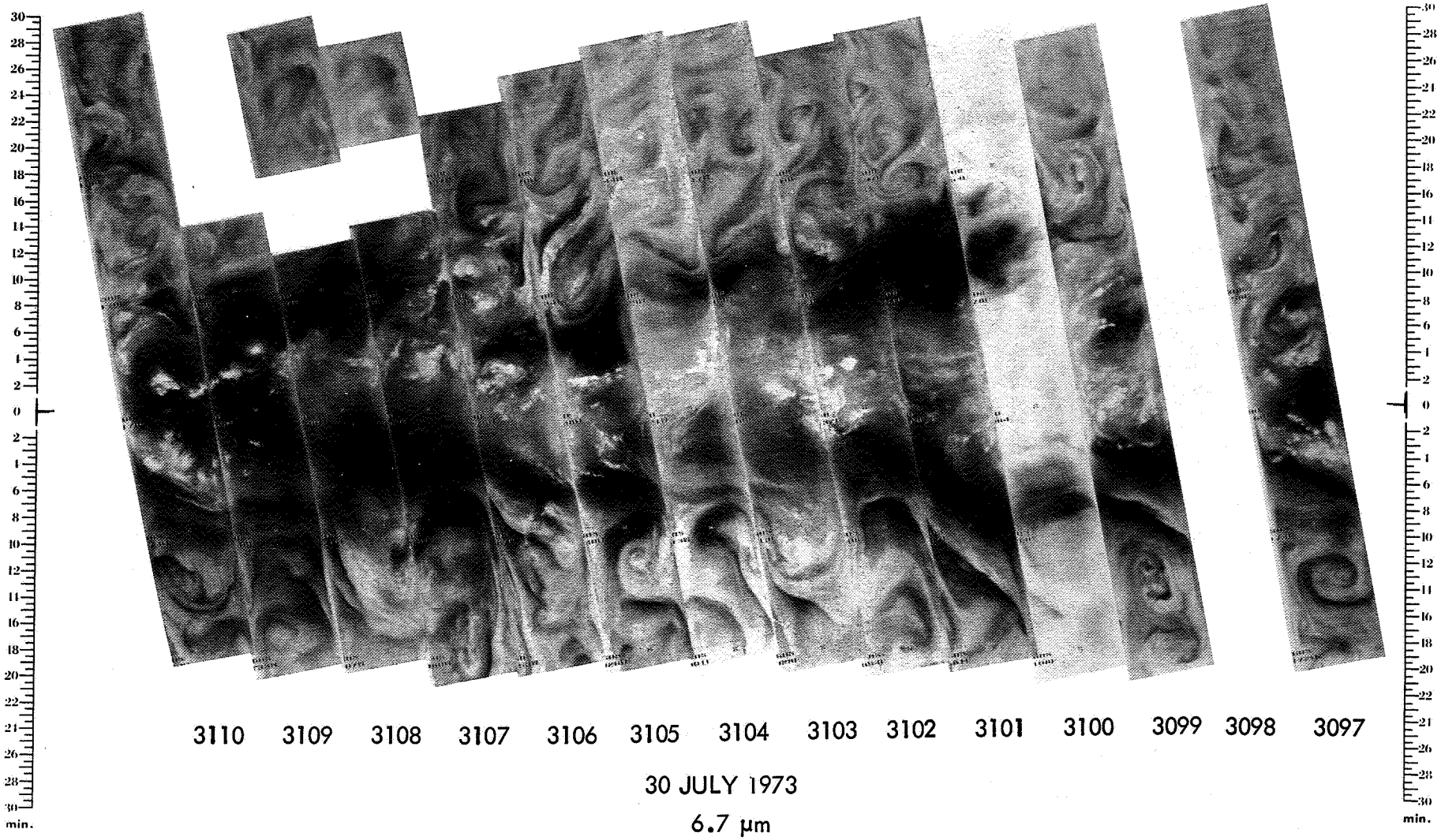

3096
3095
3094
3093
3092
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3089
3088
3087
3086
3085
3084
29 JULY 1973
6.7 μm
min.
min.

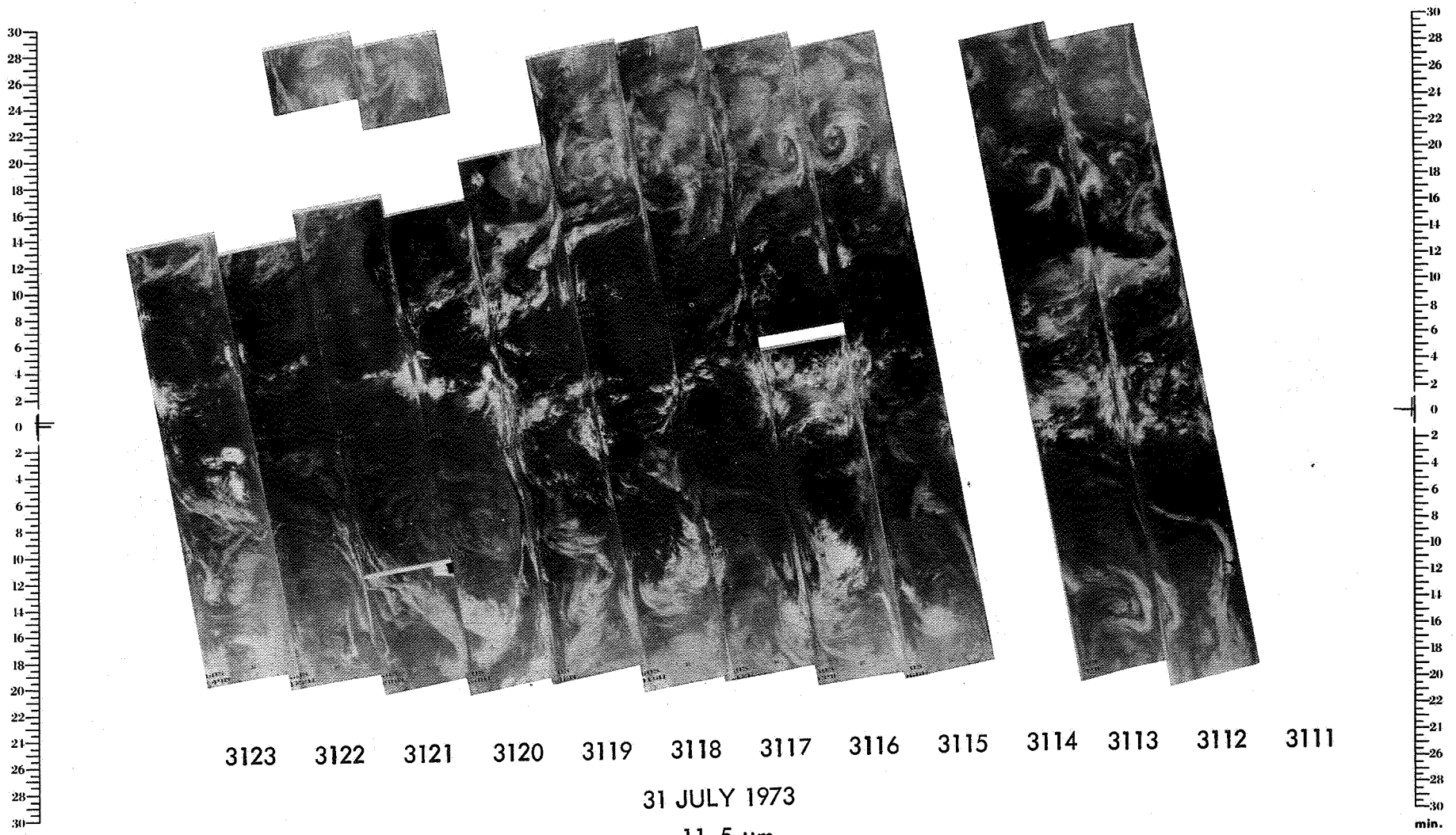


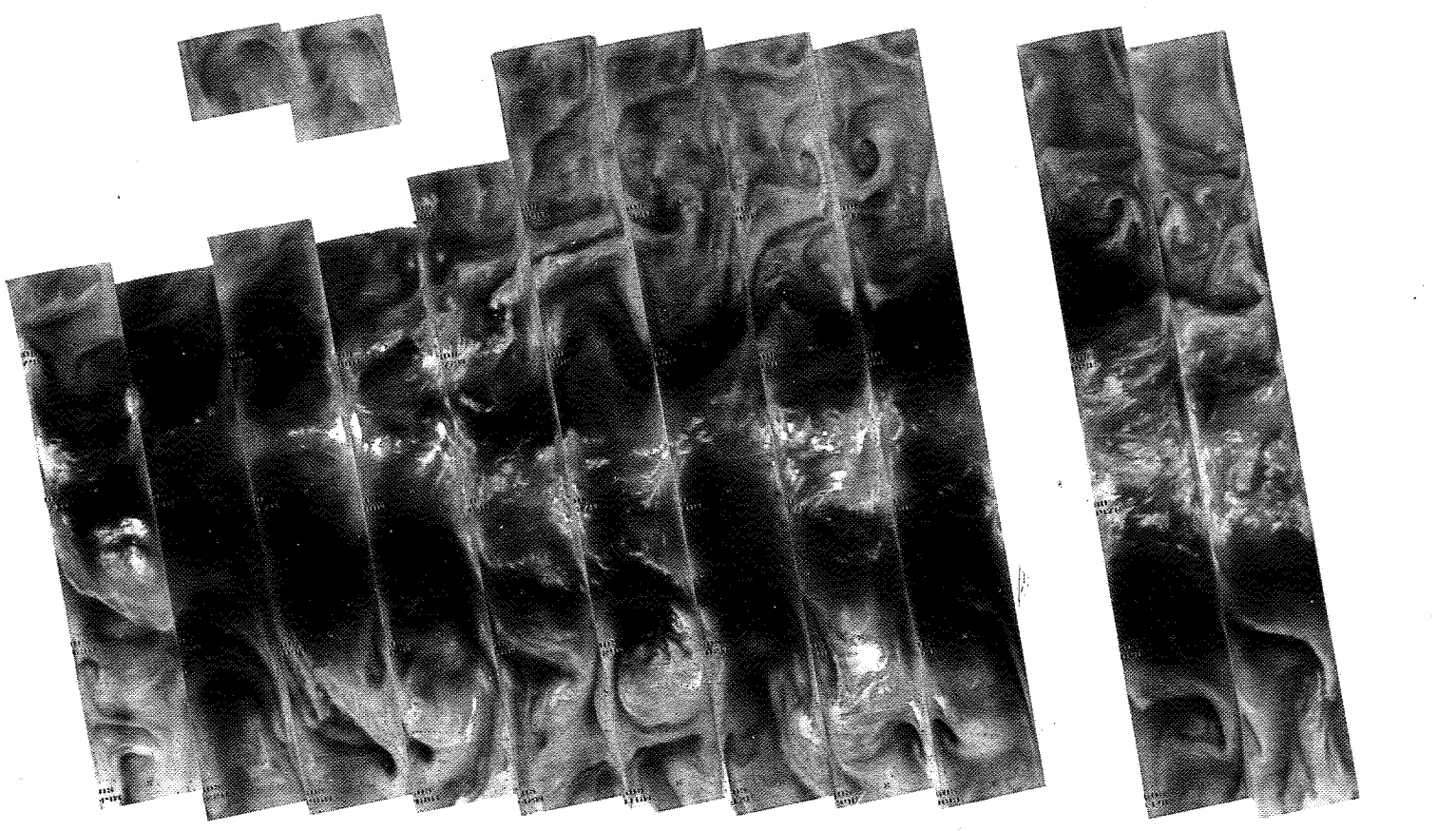
3110 3109 3108 3107 3106 3105 3104 3103 3102 3101 3100 3099 3098 3097

30 JULY 1973

11.5 μm


3110
3109
3108
3107
3106
3105
3104
3103
3102
3101
3100
3099
3098
3097
30 JULY 1973
6.7 μm
min.
min.


3123 3122 3121 3120 3119 3118 3117 3116 3115 3114 3113 3112 3111
31 JULY 1973
11.5 μm
min.
min.


3123 3122 3121 3120 3119 3118 3117 3116 3115 3114 3113 3112 3111
31 JULY 1973
6.7 μm
min.
min.

SECTION 5

CORRECTIONS TO THE NIMBUS 5 USER'S GUIDE

This section presents all corrections or additions to The Nimbus 5 User's Guide which now are known to be necessary. If additional corrections are required, they will appear in a subsequent catalog. All previous corrections will be carried forward cumulatively into each new catalog.

5.1 THIR Corrections to the User's Guide

Table 5-1

(First presented in Volume 1)
This table replaces Table 2-3 (page 31) in The Nimbus 5 User's Guide.

Table 2-3

THIR Output Voltages Versus Equivalent Blackbody Temperatures at Different Bolometer Temperatures for the 11.5 μm Channel

Blackbody Temperature (°K)	Bolometer Temperature (°C)				
	0	10	20	30	40
0*	-0.405	-0.407	-0.413	-0.421	-0.425
180	-0.618	-0.617	-0.617	-0.617	-0.606
190	-0.711	-0.709	-0.706	-0.702	-0.685
200	-0.829	-0.825	-0.820	-0.811	-0.786
210	-0.976	-0.970	-0.961	-0.946	-0.911
220	-1.153	-1.144	-1.130	-1.109	-1.062
230	-1.363	-1.351	-1.332	-1.302	-1.240
240	-1.606	-1.591	-1.565	-1.526	-1.448
250	-1.886	-1.867	-1.834	-1.783	-1.686
260	-2.202	-2.178	-2.137	-2.074	-1.955
270	-2.555	-2.526	-2.476	-2.399	-2.256
280	-2.946	-2.911	-2.851	-2.759	-2.589
290	-3.375	-3.334	-3.262	-3.153	-2.954
300	-3.841	-3.793	-3.709	-3.582	-3.352
310	-4.345	-4.289	-4.192	-4.045	-3.781
320	-4.886	-4.822	-4.711	-4.543	-4.241
330	-5.463	-5.391	-5.264	-5.074	-4.733

*Space level

Table 5-2

(First presented in Volume 1)
This table replaces Table 2-4 (page 32) in The Nimbus 5 User's Guide.

Table 2-4

THIR Output Voltages Versus Equivalent Blackbody Temperatures at Different Bolometer Temperatures for the 6.7 μm Channel

Blackbody Temperature (°K)	Bolometer Temp. (°C) 0	10	20	30	40
0*	-0.507	-0.518	-0.532	-0.556	-0.576
180	-0.607	-0.618	-0.632	-0.655	-0.674
185	-0.644	-0.654	-0.669	-0.692	-0.710
190	-0.692	-0.702	-0.716	-0.739	-0.756
195	-0.752	-0.762	-0.776	-0.798	-0.814
200	-0.827	-0.838	-0.851	-0.873	-0.888
205	-0.921	-0.931	-0.944	-0.966	-0.978
210	-1.035	-1.045	-1.058	-1.078	-1.089
215	-1.172	-1.182	-1.195	-1.215	-1.223
220	-1.337	-1.347	-1.359	-1.379	-1.383
225	-1.533	-1.543	-1.554	-1.573	-1.573
230	-1.764	-1.774	-1.784	-1.801	-1.797
235	-2.033	-2.043	-2.052	-2.068	-2.059
240	-2.350	-2.355	-2.363	-2.378	-2.362
245	-2.704	-2.714	-2.721	-2.734	-2.711
250	-3.115	-3.125	-3.131	-3.142	-3.111
255	-3.582	-3.592	-3.597	-3.605	-3.565
260	-4.110	-4.119	-4.122	-4.127	-4.077
265	-4.704	-4.714	-4.715	-4.717	-4.656
270	-5.367	-5.378	-5.376	-5.375	-5.300

*Space level

5.2 SCMR Corrections to the User's Guide.

There are no SCMR correction to the User's Guide.

5.3 ESMR Corrections to the User's Guide (First presented in Volume 3)

The following information replaces the next to the last paragraph on page 103 (Section 4, 4.5) of The Nimbus 5 User's Guide.

ESMR grid print maps of calibrated brightness temperatures are available from NSSDC in three different map projections. These are: (1) Polar stereographic, (2) Mercator, and (3) Horizontal stereographic (Bull's-eye). Program options permit contouring of the grid print maps, printing of map titles, and using fewer than the full 78 beam positions.

For each map requested, the following information is needed:

- Satellite and sensor
  Nimbus 5 ESMR

- Map type
  1. Polar stereographic
  2. Mercator
  3. Horizontal stereographic (Bull's-eye)

- Map scale
  Scale of map in millions

- Geographic area
  1. For a Polar stereographic map specify — latitude of map perimeter, and orientation of 0° meridian line. The standard position for the 0° meridian on a northern hemisphere map is 10° clockwise below a left-right horizontal line through the map's pole.

     On a southern hemisphere map, 0° meridian is 10° counterclockwise below a left-right horizontal line through the map's pole. For other orientations of the 0° meridian, the user must specify, preferably with a sketch, the orientation desired.

  2. For a Mercator map specify — latitude of upper and lower edges of map, and longitudes of left and right edges of map. Longitudes are measured west from Greenwich (0°).

  3. For a Horizontal stereographic (Bull's-eye) map specify — latitude and longitude (west from Greenwich) of map center, pseudo co-latitude of map perimeter (number of degrees of latitude from map center), and azimuth of 0° longitude line. If not specified, the azimuth will be located as it is for the Polar stereographic map.

- Calendar date of data requested

- Data orbit number(s)

- Beginning and end time (GMT) of the date for each map requested. These times are derived from information in Table 2-2 of each Nimbus 5 Data Catalog.

Optional specifications for each map are the following:

- ESMR beam parameters
  The user can specify, or limit, the range of beam positions used to produce each map. If no specifications are made, beam positions 1 through 78 are used.

- Map title
  For each map, the user may specify a title containing up to 70 characters.

- Contouring
  Normally, maps are printed without contours. To obtain contoured maps, the user must specify a contour base (or lower temperature limit e. g., 130°K) and a contouring interval (e. g., contour every 10°K). The contour program fills in the first contour interval above the contour base with the letter "A", the next interval is blank, the next is filled in with the letter "B", etc.

(The following was first presented in Volume 2.)

Table 4-4 of The Nimbus 5 User's Guide will not be supplied. Table 5-3, below, is to be used in its place.

Table 5-3

Constants for Linear Correction of Brightness Temperatures Corresponding to ESMR Beam Positions

Beam Position	A	B(°K)
1	1.058	4
2	1.027	10
3	.990	16
4	.980	14
5	.963	17
6	.987	15
7	.970	17
8	.961	19
9	.969	18

Table 5-3 (Continued)

Beam Position	A	B(°K)
10	.980	16
11	.980	17
12	1.018	10
13	.999	12
14	.989	13
15	.975	15
16	.974	15
17	.994	10
18	1.026	8
19	1.038	5
20	1.018	13
21	1.034	13
22	1.099	4
23	1.082	9
24	1.048	8
25	.986	12
26	.960	10
27	.941	11
28	.947	10
29	.937	11
30	.942	10
31	.963	6
32	1.003	-3
33	1.002	-3
34	.976	1
35	.988	-1
36	1.004	0
37-42	1.000	0
43	1.002	-3
44	.962	4
45	.960	4
46	.980	2
47	.966	4
48	.966	6
49	.948	10
50	.949	10
51	.934	12
52	.945	13
53	.988	11
54	1.019	11
55	1.041	11

Table 5-3 (Continued)

Beam Position	A	B(°K)
56	1.049	14
57	1.042	15
58	1.019	16
59	1.015	15
60	1.012	12
61	.993	13
62	.976	15
63	.998	12
64	.983	14
65	.998	14
66	.970	19
67	.982	18
68	.980	19
69	.955	24
70	.974	22
71	.941	26
72	.969	22
73	.949	30
74	.967	22
75	.956	27
76	.959	28
77	.969	26
78	1.030	13

As stated in The Nimbus 5 Data Catalog, vol. 1, the antenna properties changed after final calibration and rendered those numbers useless. The cause of the gross variations in antenna properties which were observed soon after launch has been determined to be a cross-polarized grating lobe. This finding has been confirmed through measurements on the engineering model and on the proto/flight model of the ESMR, and through theoretical calculations. The problem does not exist for the near-nadir beam positions, so those positions are unaffected. A quantitative discussion of this problem is included in the report of the Nimbus 5 ESMR Anomaly Review Committee.

An empirical calibration has been developed which removes the effect of the lobe structure and antenna loss, which vary with position, and roughly corrects for angular variations in viewing geometry. In this calibration scheme the antenna loss ratio is assumed to be 1.56 for all temperatures and beam positions, and a linear correction is applied to the data. The correction is given by:

$$T_i' = A_i T_i + B_i$$

where T_i' is the corrected brightness temperature for the i-th beam position and T_i is the brightness temperature calculated with the assumption of a constant antenna loss. A_i and B_i are empirically derived constants given in Table 5-3.

5.4 ITPR Corrections to the User's Guide

The following tables replace Table 5-3 of The Nimbus 5 User's Guide.

Table 5-4
(First presented in volume 1)

ITPR Calibration Constants for the Period 12/12/72 - 2/6/73

$R_s = a_0 + a_1 V$

R_s = radiance of the scene (mw/m^2 ster cm^{-1})

V = digital counts

Channel	a_0*	a_1
1	1.0495	-0.001773
2	141.78	-0.1813
3	166.93	-0.2046
4	173.02	-0.2065
5	174.02	-0.1940
6	174.99	-0.1977
7	170.18	-0.1995

*The calibration constant a_0 now includes the radiance of the chopper reference blackbody.

Table 5-5
(First presented in volume 2)

ITPR Calibration Constants for the Period 2/6/73 - 3/31/73

$R_s = a_0 + a_1 V$

R_s = radiance of the scene (mw/m^2 ster cm^{-1})

V = digital counts

Channel	a_0*	a_1
1	1.061	-0.001782
2	141.775	-0.1801
3	166.840	-0.2037
4	172.974	-0.2054
5	174.034	-0.1931
6	175.040	-0.1963
7	170.288	-0.1988

*The calibration constant a_0 now includes the radiance of the chopper reference blackbody.

Table 5-6
(First presented in volume 3)

ITPR Calibration Constants for the Period 4/1/73 - 5/31/73

$R_s = a_0 + a_1 V$

R_s = radiance of the scene (nw/m^2 ster cm^{-1})

V = digital counts

Channel	a_0*	a_1
1	1.056	-0.001783
2	141.6	-0.1815
3	166.8	-0.2057
4	173.0	-0.2068
5	174.0	-0.1946
6	174.9	-0.1976
7	170.1	-0.1987

*The calibration constant a_0 now includes the radiance of the chopper reference blackbody.

Table 5-7

ITPR Calibration Constants for the Period 6/1/73 - 7/31/73

$R_s = a_0 + a_1 V$

R_s = radiance of the scene (mw/m^2 ster cm^{-1})

V = digital counts

Channel	a_0*	a_1
1	1.049	-0.001758
2	141.8	-0.1820
3	166.8	-0.2061
4	173.1	-0.2072
5	174.1	-0.1954
6	175.2	-0.1982
7	170.3	-0.1985

*The calibration constant a_0 now includes the radiance of the chopper reference blackbody.

The following are changes to the ITPR in Section 5 of The Nimbus 5 User's Guide: (First presented in Volume 2)

- The table, Nimbus 5 Compacted Data Format, at the bottom of page 125 should read:

Word	Format	Description
1	I	GMT (seconds)
2	Spec 1	Julian Day and Year
3 - 162	Spec 2 (F1, F3)	Calibrated IR Data
163 - 182	F1	Latitude
183 - 202	F1	Longitude
203 - 222	F1	Zenith
223	I	Grid Type (0 = Nadir) (1, 2, or 3 = Scan)
224 - 225	-	Zero Fill

- On page 126 in the paragraph describing Spec 2, the last two lines of that paragraph should read:

  ". . . 4-word pattern will be repeated thru word 162, resulting in 40 sets of IR measurements."

- The next paragraph (on page 126, after description of Spec 2) should read:

  "Each data record will contain 5 major frames of data (225 24-bit words for each major frame) with a total of 1125 24-bit words, or 450 60-bit words. Because major frames will contain either 34, 36 or 40 earth views for each channel, there will be zero fill in the IR data words when 34 or 36 views are present, and the corresponding latitudes and longitudes will be fictitious. This applies also to data samples which occur during retrace. Zero fill will be used to produce the constant-length record when the number of major frames in a day is not a multiple of 5."

- In the next paragraph the following changes should be made:

  Line 1: ". . . with a density of 556 6-bit bytes . . ."
  should read: ". . . with a density of 800 6-bit bytes . . ."

  Line 3: ". . . per day at 320 major frames . . . about 640 records"
  should read: ". . . per day at 400 major frames . . . about 960 records"

  Line 4: ". . . will contain about 5 days . . ."
  should read: ". . . will contain about 4 days . . ."

5.5 SCR Corrections to the User's Guide (First presented in Volume 3)

The following information supplements the SCR information in the User's Guide and has been derived from post-launch information.

The filters of the A and B channels have minor leaks at short wavelengths. Corrections for these leaks are made using the radiance measured by channel C4 (11.5 μm window channel) in the equation,

$$R_i' = R_i(1 + \gamma_i) - a_i\gamma_i C_4,$$

where R_i is the measured channel i Radiance and R_i' is the corrected radiance. Table 5-7 gives values of γ and $a\gamma$ for the A channels and channel B4. Corrections are of order 1-2 radiance units (mw/m^2 ster cm^{-1}) for the A channels. This is small compared with typical measured radiances of 80 units, but still 5-10 times larger than the rms noise. The correction to B4 is normally about 5 radiance units.

The B difference channels are not affected by leaks since the differencing operation causes the leaks to cancel exactly. The equation

$$R_{ij} = R_i + (R_i - R_j)\,\beta_{ij},$$

where R_{ij} is the calculated channel B_{ij} radiance, and R_i is the measured channel B_i radiance, is used to derive the B difference channel radiances (B12, B23, and B34) from the measured B channel radiances (B1, B2, B3, and B4). Table 5-9 gives the coefficients β_{ij}.

Table 5-8

Correction Coefficients γ and $a\gamma$ for the SCR Temperature Sounding Channels

Channel	γ	$a\gamma$
A1	.0305	.015
A2	.0235	.0105
A3	.0146	.0057
A4	.0595	.025
B4	.153	.0165

Table 5-9

SCR B Difference Channel Coefficients β_{ij}

Channel	β_{ij}
B12	9.50
B23	10.05
B34	4.83

Figure 5-1 gives the experimenter's current best estimates of the weighting functions of the A channels and B4, when corrected as above, and of the B difference channels. These channels measure emission from carbon dioxide in the ν_2 band near 15 μm. The weighting functions were derived for a climatological mean temperature profile and, to a good approximation, are independent of temperature profile for the range of temperature which occurs in the atmosphere. These weighting functions are a compromise between theoretical computations, using spectral line parameters together with measured filter transmission profiles, and pre-launch test results for the flight instrument. This method is similar to that used for the Nimbus 4 SCR and was described in more detail by Barnett et al (1972).

5.6 NEMS Corrections to the User's Guide

There are no NEMS corrections to the User's Guide.

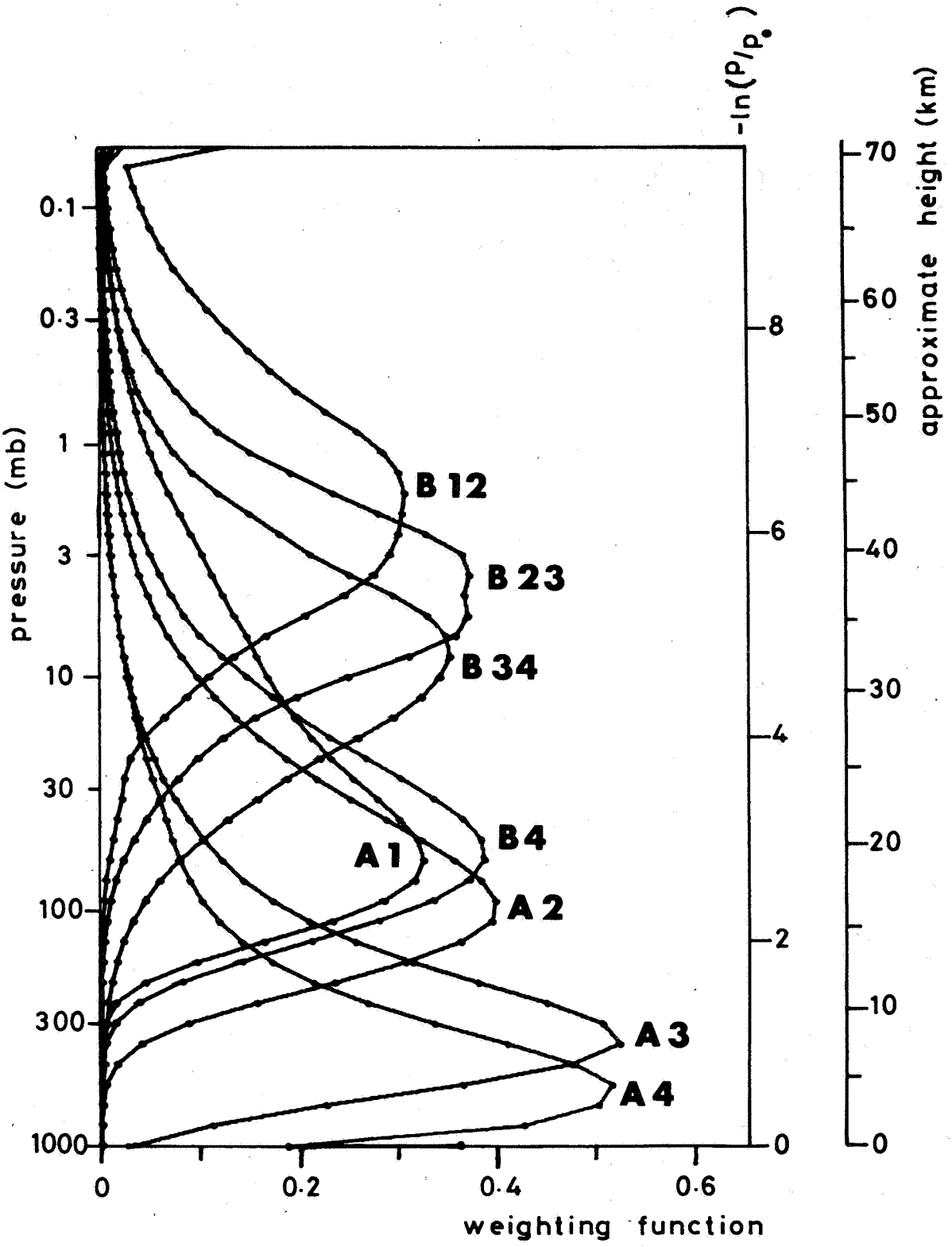
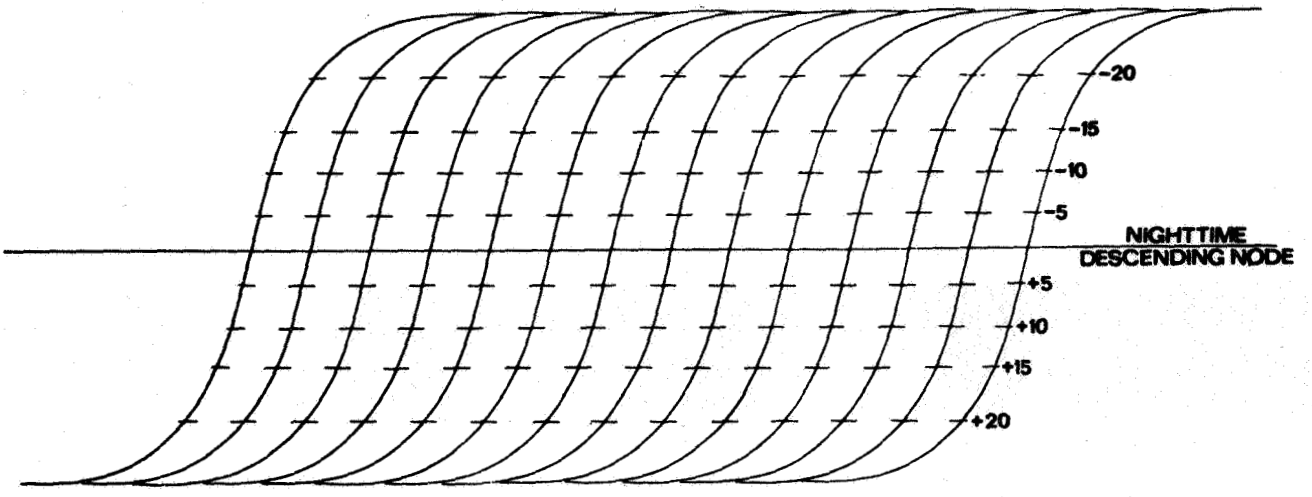
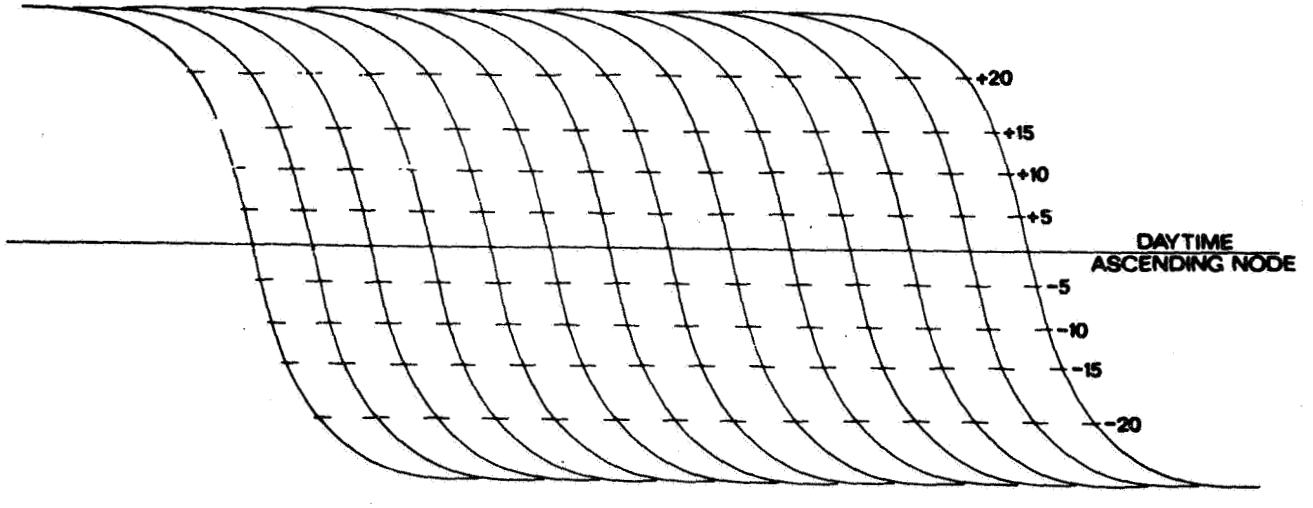


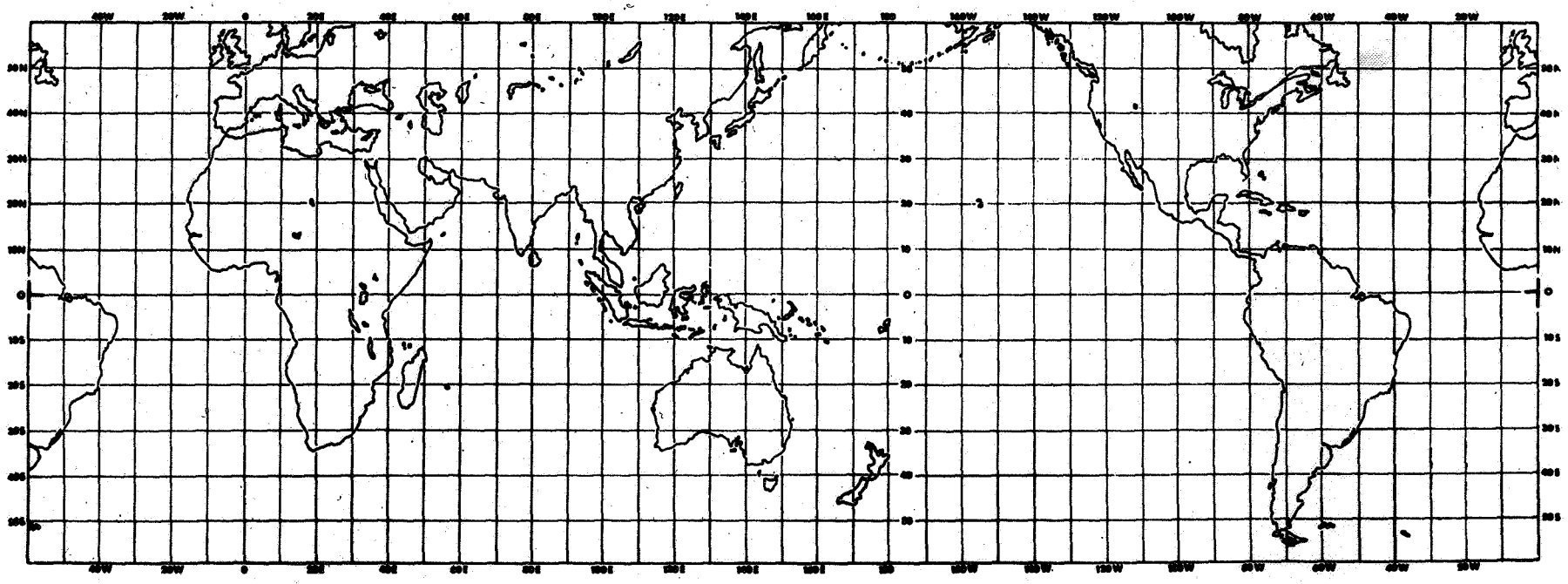
Figure 5-1. Weighting Functions of the Temperature Sounding Channels of the Nimbus 5 SCR. The height scale is approximate. The abscissa is a weighting function on an arbitrary scale.



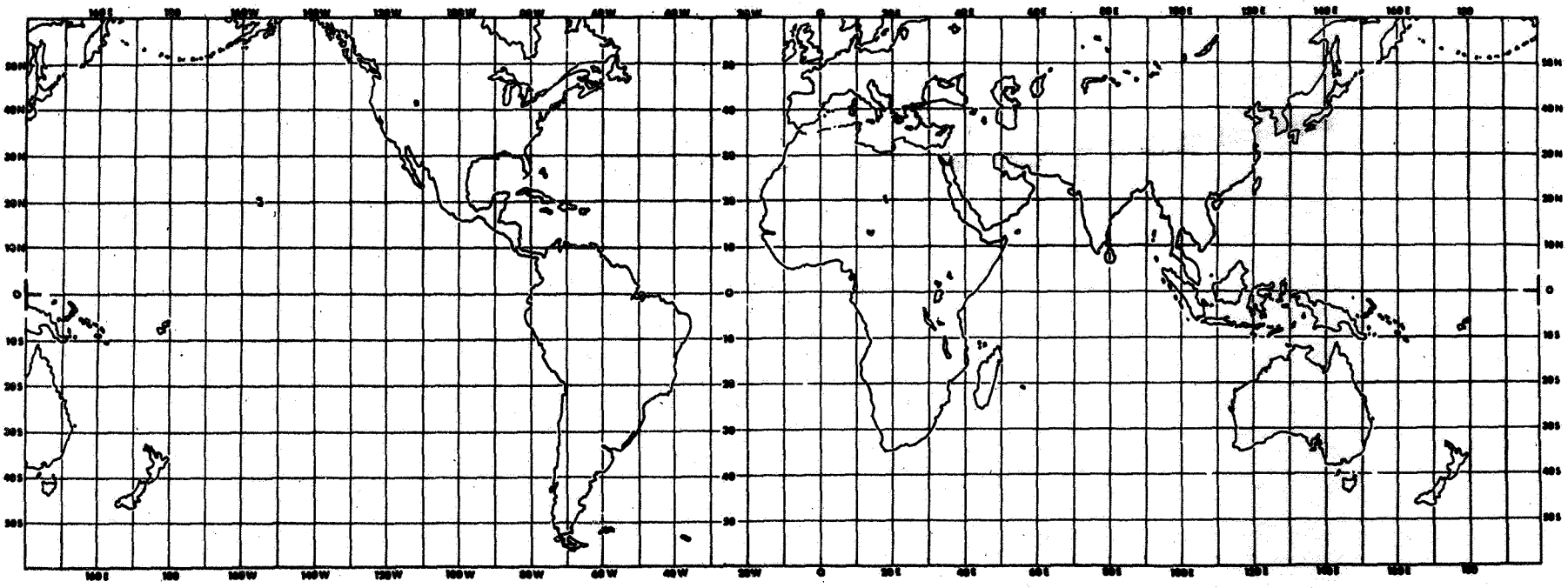
NIMBUS SUBSATELLITE TRACKS OVERLAY



NIMBUS SUBSATELLITE TRACKS OVERLAY



Location Guide
Average Scale for Nimbus
THIR Nighttime Montages



Location Guide
Average Scale for Nimbus
THIR Daytime Montages